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WOODWARD PARK COMMUNITY PLAN
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FINAL ENVIRONMENTAL IMPACT REPORT
No. 10100

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PREFACE

The completion of the update of the Woodward Park Community Plan was made possible only through the efforts of many individuals. The City of Fresno extends its gratitude to the following:

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SUMMARY OF LEGISLATIVE ACTIONS

PLANNING COMMISSION RESOLUTION NO. 9721, August 16, 1989

Certified Final Environmental Impact Report (EIR) No. 10100.

Identified significant adverse environmental effects and mitigation measures.

Stated the Overriding Considerations that balance benefits of the project against unavoidable environmental risks.

Found that alternatives, including "no further development," are infeasible.

PLANNING COMMISSION RESOLUTION NO. 9722, AUGUST 16, 1989

Recommended that the Woodward Park Community Plan Update Citizens Advisory Committee Recommendation with Modifications be approved.

Recommended that the 1984 Fresno General Plan be amended.

Recommended that the portion of the Alluvial - First Specific Plan within the Woodward Park Community Plan be repealed.

CITY COUNCIL RESOLUTION NO. 89-463, December 5, 1989

Certified Final EIR No. 10100.

Identified significant adverse environmental effects and mitigation measures.

Stated the overriding considerations that balance benefits of the project against unavoidable environmental risks.

Found that alternatives, including "no further development," are infeasible.

Established verification and monitoring procedures for the availability of public services.

CITY COUNCIL RESOLUTION NO. 89-464, DECEMBER 5, 1989

Adopted the Woodward Park Community Plan Update.

Amended the 1984 Fresno General Plan.

Repealed that portion of the Alluvial - First Specific Plan within the Woodward Park Community Plan Area.

The full text of the City Council resolutions are contained in the Appendix.

INTRODUCTION

On January 11, 1988, the City Council received a report from the Department of Public Works detailing the results of the City of Fresno's Fiscal Impact Study of the Northeast Fresno Growth Area (November 1987). This study addressed the ability of the Woodward Park area to absorb the population increases projected by the 1984 General Plan. That report identified serious deficiencies in the northeast area's sewer, water, and circulation systems, and proposed a number of remedial measures to correct them. Upon receiving this report, the Fresno City Council directed the Development Department to initiate an update of the City's Woodward Park Community Plan.

Authorization for this update is granted by the City of Fresno's Local Planning and Procedures Ordinance, as contained in Article 6, Chapter 12, of the Fresno Municipal Code.

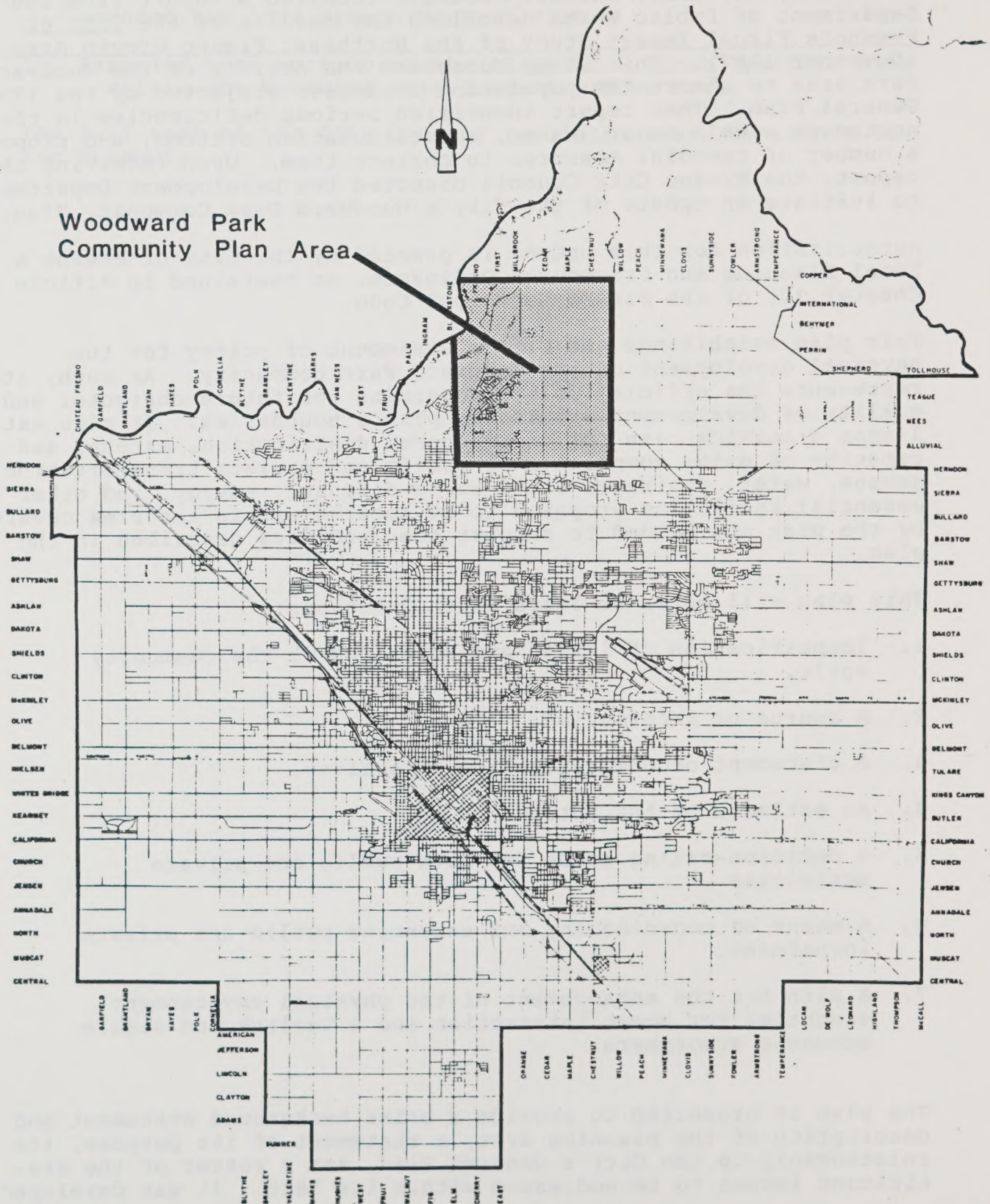
This plan establishes the City's statement of policy for the physical development of the Woodward Park community. As such, it represents the official policy governing the future character and quality of development within the plan's boundaries. It also establishes a service plan for the proposed distribution, extent, and capacity of major components of public and private transportation, sewage, water, drainage, solid waste disposal, energy, and other essential facilities proposed to be located within the area covered by the plan and needed to support the land uses described in the plan.

This plan will serve at least seven functions:

1. Identification of issues and solutions at the community scale.
2. A source of information.
3. A statement of community-wide objectives.
4. An estimate of the future.
5. A decision-making guide for both public and private activities.
6. A means of coordinating and enhancing public and private investment.
7. A plan for the enhancement of the physical environment essential for human interaction and a healthy and stable economic atmosphere.

The plan is organized to provide a brief background statement and description of the planning area, a statement of its purpose, its relationship to the City's General Plan, and a roster of the significant issues to be addressed within its text. It was developed

FIGURE 1-0 Woodward Park Community Planning Area Vicinity Map



with the participation of all City departments and the Woodward Park community and subjected to extensive review by the Woodward Park Update Committee, the Fresno City Planning Commission, and the Fresno City Council.

Background

Named after the Woodward Regional Park and Bird Sanctuary, the Woodward Park Community Plan encompasses approximately 13 square miles or 8,290 acres located on the northeastern edge of the City of Fresno. It is bounded on the south by Herndon Avenue, on the west by Blackstone Avenue (West Avenue was the boundary, but was changed in favor of Blackstone Avenue during the Bullard Community Plan update), on the north by the San Joaquin River and Copper Avenue, and on the east by Willow Avenue.

This planning area is a rapidly developing suburban community characterized by moderate to above-average priced single-family homes and a number of large office developments located along Herndon Avenue. The area is also located directly in the path of the City's northward growth, its population having increased from approximately 3,600 persons in 1970 to over 16,200 as of January 1, 1988. To date, development has been of a relatively high caliber and recognized for its aesthetic value. Predominant market trends, contemporary development strategies, and the willingness of its residents to become involved in neighborhood planning issues have been instrumental in the implementation of good design, increased landscaping, and the preservation of compatibility between various land uses.

Currently under development within the planning area are two planned communities located along the northern reaches of Friant Road, an expanded medical complex at Millbrook and Herndon Avenues, major office and commercial development along North Fresno Street, a new elementary school on Champlain Drive, a new Kaiser Hospital at Alluvial Avenue and Fresno Street, the expansion of Woodward Park, and numerous single-family subdivisions.

Continuation of the northward urban growth trend in the Woodward Park community has occurred primarily as a result of the following factors:

1. The construction of the Herndon Interceptor Sewer.
2. Development of regionally significant commercial services and employment centers along Shaw and Herndon Avenues.
3. Establishment of an Urban Growth Management (UGM) process which has accommodated the incremental extension of the basic street, sewer, and water systems at a cost that could be borne by the (housing) market.

4. The construction of Saint Agnes Hospital south of Herndon Avenue at Millbrook Avenue.
5. The extension of Freeway 41 northward to the San Joaquin River.
6. The availability of large holdings of land to developers and speculators.
7. The construction of a new high school at Teague and Millbrook Avenues by the Clovis Unified School District in a relatively homogeneous middle and upper-middle income area.
8. The adoption of a revised General Plan by the City of Fresno which substantially increased both the area of urbanization and its planned density.
9. The continuing development of the Woodward Regional Park by the City of Fresno
10. The lack of large areas of subdividable residential land south of Herndon Avenue, between Clovis Avenue and Freeway 99.

In response to the increasing demands of growth on the area, the City of Fresno developed the Woodward Park Community Plan in 1976. That plan was built around the concept of a community center or focal point of activity (to be developed along the east side of Blackstone Avenue, between Audubon and Alluvial Avenues) with a gradient of residential densities radiating outward toward the plan's peripheral areas. This essentially created a higher density residential core immediately adjacent to the proposed community center with progressively lower densities radiating outward, a concept the Woodward Park community continues to follow.

Purpose

The Woodward Park community is in transition. Before 1970, it was an agrarian area comprised of farms, orchards, and rural residential development. During the 1970's and 1980's, it has become one of the fastest growing urban areas of the City. Population projections of recent years forecast a continuation of growth pressures for the Woodward Park area, but these projections do not consider the real local constraints to continued urban growth. These constraints include the escalating public costs associated with fringe urban growth, citizen concern with the adequacy and equitability of public services throughout the City, the lack of revenue sources for funding-needed services at the local level, and increasing demands upon limited natural resources.

The Woodward Park Community will continue to grow despite constraints, but it can expect a transition to a more stable rate of growth which will manage and balance new development. It is the intention of this community plan to promote that stability.

This interim plan is a statement of the public land use policy that will: (1) guide development of the area in a manner consistent with the City's adopted General Plan; and (2) direct the physical growth and change of the Woodward Park community for the next five years. It will be the standard for determining the consistency of development entitlement proposals (i.e., rezonings and subdivisions) in the Woodward Park community and will provide for an internally compatible land use pattern that can be adequately accommodated by the City's existing and planned public service delivery system. The policies in this plan are intended to assure that development of individual properties will be done in a manner that enhances the physical growth of the Woodward Park community.

This plan should not be considered a static document. It is intended to provide guidance for the orderly growth of the community. In order to respond to unanticipated changes in environmental, social or economic conditions, the plan must be continually monitored and amended when necessary in order to remain relevant to community and City needs.

Once adopted, two additional steps will follow: implementation and review. Implementation is the process of putting plan policies and recommendations into effect. Review refers to the process of monitoring the community and recommending changes to the plan as conditions in the community change. Guidelines for implementation are provided in the plan, but the actual work must be based on a cooperative effort of private citizens, City officials, and other agencies. It is contemplated that organizations such as the Woodward Park Homeowners Association and other citizen groups will provide the continuity needed for a sustained, effective implementation program.

Significant Issues

A substantial increase in the intensity of urban development was planned for the Woodward Park Community Plan area by the 1984 Fresno General Plan. The majority of the area was designated for a residential density of 10 dwelling units per acre with a considerable amount of office and commercial development, including mid-rise structures. However, this increased urban intensity was not reflective of continuing residential development trends in the community (four units per acre), was disproportionate to other community areas, and could generate demands far in excess of the capacities of planned public facilities and available resources.

This update of the community plan was initiated in order to balance planned land uses with the capacity of planned public facilities and available resources and to guide future development in a manner compatible with the quality of life that characterizes the community. This section identifies those important issues that must be addressed as part of the planning effort.

1. Groundwater reserves are uncertain, both in terms of quantity and quality, and may not be able to meet the area's needs as urban development continues.
2. The capacity of major sewer trunk pipelines is limited and may not be sufficient to accommodate sewer flows generated by projected urban development.
3. The circulation system, as designed, may not be capable of accommodating the anticipated vehicular traffic demands of projected urban development.
4. Police, fire, and emergency response times may be substantially lengthened as traffic congestion increases.
5. Planned land uses no longer reflect actual development trends.
6. Area schools are experiencing overcrowding.
7. Current office and commercial land use designations may exceed projected community demands and may be improperly sited.

While this list may be far from complete, it does accurately summarize the major issues that are interacting to shape the area's land use patterns and will provide a valuable point of reference against which the plan's success or failure may be measured.

Relationship to the City's General Plan

Article 8, Section 65454, of the State of California Government Code provides that:

"No specific plan may be adopted or amended unless the proposed plan or amendment is consistent with the General Plan."

The City of Fresno's General Plan provides for broad-based economic growth and stability by promoting balanced growth throughout the

City. The plan designates special new growth areas in the southeastern, western, and northeastern fringes of the City, but mandates for the northeastern growth area that a feasibility study assessing the area's ability to absorb projected population increases be completed prior to the approval of any development in those areas.

The General Plan has proposed to provide for balanced growth by:

1. Promoting in-fill development in older portions of the City.
2. Facilitating the development of multiple centers at designated sites to serve as the focal point for each of the City's major communities.
3. Providing for the expansion of the City's public infrastructure in an efficient and fiscally-sound manner.
4. Limiting mid-rise development occurring outside of the City's Central Area to the Freeway 41 corridor.

The Woodward Park Community Plan is a refinement of these policies, having been designed to provide for the development of a specific community identity within the framework outlined by the General Plan and to facilitate the larger plan's implementation. It also serves as a bridge between the General Plan and specific development and improvement projects. Because of its narrower geographic boundaries, this plan represents a way of "humanizing" the General Plan -- bringing it down to a scale where residents can become familiar with the conditions of and plans for their specific neighborhoods.

PLAN CONCEPT

The issue of constructing major new public facilities can only be decided during a comprehensive General Plan update. It is, therefore, the intent of this plan to defer the need for the construction of major new public facilities (i.e., new trunk sewer and water treatment facility) by providing for the development of a land use plan for the Woodward Park community that utilizes existing public facilities in a manner consistent with the City's General Plan. The General Plan calls for balanced growth throughout the City, the development of a community center or focal point in each planning area, the promotion of City-wide economic growth and stability, the promotion of in-fill oriented development, and the implementation of fiscally-sound methods to expand the City's public facilities in an efficient manner.

It is also the intent of this plan to respond to the list of

issues identified in the plan as generating a need for an update. The issues are: (1) availability of potable water; (2) an incomplete and possibly inadequate circulation system; (3) unbalanced metropolitan growth; (4) regional air quality problems; (5) school overcrowding; and (6) inadequate public resources to extend and/or maintain public services.

Furthermore, it is the intent of this plan to preserve and enhance the relationship of certain regional facilities located in or near the Woodward Park area. These facilities, which serve a metropolitan-wide constituency, include Freeways 41 and 168, Friant Road and Herndon Avenue, Woodward Park, Saint Agnes Hospital and related facilities, and those existing facilities owned by the Clovis Unified School District.

Finally, it is the intent of this plan to take an aggressive position to protect and preserve the environment of the San Joaquin Riverbottom, the area's existing groundwater system extending to the north and east of the Woodward Park area, the San Joaquin River and High Sierra View Shed, and the single-family residential life-style prevalent in the area.

In order to accomplish this, land uses would be distributed around a mid-rise commercial/office corridor bounded by North Fresno Street, Audubon Drive, Blackstone Avenue, and Herndon Avenue. Office development would adjoin this commercial corridor, extending eastward toward North First Street and along Herndon Avenue. The plan concept would be organized such that a gradient of residential densities would radiate outward towards the plan's peripheral areas. This would mean the development of higher densities would occur near the proposed mid-rise corridor with progressively lower densities radiating outward towards Willow and Copper Avenues.

The plan's basic components are as follows:

Regional Commercial needs would be met by the proposed River Park Center located north of Alluvial Avenue, between Blackstone Avenue and Friant Road.

Neighborhood and Community Shopping needs would be met through designation of planned commercial sites restricted to the intersections of two arterial streets. The amount and distribution of commercial sites would be limited based on established population demand to preclude: (1) the generation of traffic congestion; (2) land use compatibility problems; and (3) the development of strip commercial areas.

Office Development in the Woodward Park area has been slow to materialize, but has begun to accelerate dramatically within the last two years. This plan has provided for the development of

approximately 474 acres of office-designated property, enough land to accommodate between six million and ten million square feet of office development or from four to six times the amount of existing office square footage developed along East Shaw Avenue or within the Central Area.

This level of office development would appear to exceed local demand. Therefore, it is the intent of this plan to ensure that office development does not occur at the expense of planned office development elsewhere in the metropolitan area or in a manner that would adversely affect or conflict with the regional traffic carrying role of the Woodward Park area's street system. Moreover, it must also be recognized that not all of the acreage planned for office development can or will be developed with office uses. The possibility exists that parcels planned for office uses will be forced to seek other land use designations. This may, in turn, have a significant impact on adjacent land use patterns and public facilities -- impacts that can only be fully assessed on a project-by-project basis. However, the office portion of the land use section has provided for the implementation of specific standards designed to ensure future land use compatibility and the adequacy of needed public facilities.

Medium-High Density Residential (10 to 18 units per acre) or multiple-family development would continue to constitute approximately 35 percent of the total residential housing stock for the Woodward Park community. New multiple-family uses would be limited to the area west of North First Street and a quarter-mile south of Alluvial Avenue, except where remnant parcels remain and land use compatibility can be ensured. In addition, it should be stressed that the intent of this interim plan update is to continue to preserve and perpetuate the planning area's existing single-family residential character and to discourage the development of large, unplanned apartment complexes pending substantive review of the area in the City's scheduled 1994 General Plan Update.

Medium Density Residential Development (five to ten units per acre), as characterized by the R-1 planned development, will serve as the primary buffer between commercial and office uses and single-family neighborhoods. This designation will continue to be an appropriate land use along Alluvial Avenue, Nees Avenue west of Cedar Avenue, on small, difficult to develop lots, and at all major intersections throughout the planning area.

Medium-Low Density Residential Development (two to five units per acre) will continue to comprise the bulk of all residential uses. Beginning east of First Street and north of Alluvial Avenue, this designation would extend outward toward Copper and Willow Avenues.

Low Density/Rural Residential lots (zero to two units per acre)

will identify those areas where large estate-type lots in excess of 15,000 square feet prevail.

Urban Reserve will constitute an interim land use designation to be applied in areas where insufficient information concerning sewer capacity or water availability exists to permit the designation of property for a more intensive use. Plan amendments within the urban reserve designation would only be permitted following a demonstration of serviceability of the affected property. This designation would also protect those areas where public services are questionable, would limit additional lot splits, and would allow for the orderly extension of public services by preventing urbanization without first ensuring the availability of a wide range of public services.

Open Space areas in the Woodward Park community would be broken down into three areas: (1) community park; (2) riparian/river-bottom; and (3) passive neighborhood parks. Woodward Park would continue to function as a passive park/bird sanctuary not to be developed with more intensive uses. The riverbottom would be preserved and expanded upon, with the riverbottom being restricted to open space/agricultural-type uses.

Public Facilities would be developed as follows:

Circulation. The Woodward Park area's circulation system would be designed to direct traffic away from North Cedar Avenue toward three points: (1) the future Freeway 168; (2) Herndon Avenue and Freeway 41; and (3) Friant Road and Freeway 41. It would also be designed to interface with a designated future transit corridor located adjacent to and parallel with Freeway 41. Existing transit facilities would be centered near the proposed regional center where possible, providing the basis for an expanded transit system in the area. Finally, conflicting land use patterns along Herndon Avenue and Friant Road, where property remains undeveloped, would be redesignated to avoid unnecessary congestion and potential vehicular gridlock.

Sewage Treatment and Sanitary Sewers. No new trunk sewer facilities would be extended to the Woodward Park area. The extension of a new facility would impact land use planning for the area, result in accelerated growth pressures beyond the City's Sphere of Influence, perpetuate unbalanced growth at the expense of the rest of the city, overload the area's water system and circulation system, and impair the area's overall air quality. However, through the use of flow metering, holding tanks, the possible elimination of sewer constriction points, and other peak reducing methods yet to be identified, sewer capacity for urbanization of the area can be maximized.

Public Water Supply. The current system of City wells will

continue to serve as the sole source of drinking water for the Woodward Park community. However, water resources within the Woodward Park planning area are limited and subject to contamination. It is the intent of this plan to provide for the maximization of these resources through water conservation, recharge, and the implementation of a stringent monitoring system. This plan does not envision the utilization of surface water resources for drinking purposes or the construction of any surface water treatment facilities. However, it should be noted that should the results of ongoing water studies show a need (i.e., the level of groundwater contamination increase or the production rates of on-line wells decline), surface water treatment for drinking purposes may become necessary.

Environmental concerns that must be addressed as part of any land use decision include:

Water Quality and Quantity. Existing groundwater quality and quantity is sufficient to permit the urbanization at a density of less than five units per acre in the Woodward Park community. The City currently has the ability to treat and transport, at substantial cost, 60,000 acre feet of water from Millerton Lake. However, this supply will be needed, and is utilizable at substantial lower costs, to stem DBCP intrusion elsewhere in the developed urban area. The long-term water picture in this area is only partially known, but will be detrimentally affected by any urbanization permitted north of Copper Avenue or east of Willow Avenue, north of Nees Avenue. New development may be required to be metered. Also, a water management plan for the area, including a massive recharge program, must be implemented.

Air Quality. Urbanization of the Woodward Park community will continue to adversely impact local air quality primarily due to longer work trip lengths, an increase in traffic congestion in the area, and climatic conditions. However, through reduction in land use intensities to below five units per acre, reducing vehicular congestion on both area expressways, and by extending Freeways 41 and 168, impacts can be minimized.

Noise. The major noise sources in the Woodward Park community are roadways such as Freeway 41, Herndon Avenue, Friant Road, and commercial development such as shopping centers, industrial development, and sand and gravel extraction. As growth and development occurs in the Woodward Park area, noise levels will continue to increase. It is the intent of this plan to minimize the potential, where possible, of noise impacts on area residents by: (1) preventing residential development in noise impacted areas; and (2) incorporating effective noise mitigation measures as part of the planning area's site development criteria.

The plan concept, as presented, is consistent with the City's General Plan and responsive to those issues generating the need for this plan. It will signal significant change in the area's growth patterns as managed growth becomes the City's established policy for the area. More importantly, by providing for balanced growth the plan will facilitate growth in other areas of the City that currently cannot compete, including the Central Area, Southeast Fresno, and the West Area.

TABLE 1-0
PLANNED LAND USES
(adopted December 5, 1989)

<u>Plan Designation</u>	<u>No. of Units</u>	<u>Pop.</u>	<u>Acreage</u>
Low Density Residential	108	301	72
Medium-Low Density Residential	16,119	44,972	3,537
Medium Density	3,336	9,307	443
Medium-High Density	5,175	10,402	354
Office			531
Neighborhood Commercial			65
Community Commercial			64
General Commercial			87
Regional Commercial			40
Public Facility/Church			281
Recreation/Open Space			731
Park/Ponding Basin			388
River and Rights-of-Way			404
Urban Reserve			<u>1,353</u>
TOTAL	<u>24,738</u>	<u>64,982</u>	<u>8,350</u>

Note: Low - 1.5 d.u/ac.
 Med-Low - 4.5 d.u/ac. -- population 2.79 persons/household
 Medium - 8 d.u/ac.
 Med-High - 15 d.u/ac. -- population 2.01 persons/household

-
- Section acreages do not always total 160 acres.
 - No adjustment made for collectors, arterials or expressways.
 - River and rights-of-way include San Joaquin River and major streets.

LAND USE ELEMENT

The interim Woodward Park Community Plan land use map, together with the goals and policy/implementation measures, will implement the plan concept of the Woodward Park Community Plan. This concept provides for a major activity center, balanced growth, and gradation of densities, as described in the Introduction. The plan map is a pictorial display of the type and location of uses that achieve the plan concept. The goals and policy/implementation measures provide written statements establishing land use functions, distribution criteria, and compatibility standards. They are designed to direct development and to provide a basis of analysis for any proposed plan amendment.

The Woodward Park Community Plan activity center is not the geographic center of the community, but serves as its major focal point. It is actually located in the southwest corner of the planning area, at the hub of a regional circulation system that includes a freeway, two expressways, and several arterial and collector streets. In this location, highly intensive office, commercial, and public uses will fulfill not only community needs, but much of the surrounding metropolitan and regional area needs.

An extension of intensive residential, office, and commercial uses has also been planned eastward from the activity center as a corridor along the Herndon Avenue expressway. However, this area's intensity is moderated by Herndon's role as a principal east-west regional traffic carrier, and by its expressway standard which prohibits direct access. Relatively large, medium-high density residential and office complexes are planned as the predominant use, with a limited number of moderately-sized commercial developments included to serve community and commuter needs.

Beyond the activity center and Herndon Avenue corridor, a range of less intensive residential uses have been planned in a manner compatible with public facility capacities. Two secondary commercial centers to serve the community trade area are planned at the First Street/Nees Avenue intersection and the Champlain Drive/Perrin Avenue intersection. Several smaller commercial centers, office complexes, and medium-high density residential developments may be dispersed to meet local needs at appropriate locations when consistent with plan policies and criteria.

Local needs have been determined, based on the availability of public services and the population holding capacity of the overall planning area.

It should be noted that in order to avoid increasing local congestion and noise levels in planned residential areas of the community, as well as air quality impacts, commercial development must be kept to a minimum -- responding only to local needs. Furthermore, for those areas where sewer availability cannot be

guaranteed and/or groundwater supplies remain questionable, an urban reserve designation will be applied. The urban reserve designation constitutes an interim land use designation designed to protect those areas where public services are questionable and groundwater problems can be demonstrated. Plan amendments to more intensive land use designations will be permitted only upon the demonstration of serviceability of a given parcel.

Urban Form and Extent

Goal:

- 1-1. Designate the amount and extent of urban development necessary to accommodate planned urban growth consistent with available resources and the efficient provision of public facilities and services.

Policies and Implementation Measures

- 1-1.1 Within the plan boundaries, accommodate development of urban uses subject to compliance with applicable plans, policies, procedures, and standards.
- 1-1.2 Plan amendments within areas designated for urban reserve may occur only when it can be demonstrated that public services are adequate.
- 1-1.3 Within the designated urban reserve area, permit only that development which is consistent with the AE-5 and AE-20 zone classification.

Goal:

- 1-2. Provide for the location, diversification, and functional relationship of land uses necessary to implement the activity center, intensity corridor, balanced growth, and gradation of density concepts of the Fresno General Plan and Woodward Park Community Plan.

Policies and Implementation Measures

- 1-2.1 Planned uses shall be implemented in accordance with the plan designations and corresponding zone districts as set forth in Article 4, Chapter 12, of the Fresno Municipal Code (Procedures Applicable to Zoning). Amendments of the community plan to change goals, policies or planned uses shall be processed as set forth in Article 6, Chapter 12, of the Fresno Municipal Code (Local Planning and Procedures Ordinance).

The following table describes the land use designations, definitions, and corresponding consistent zoning.

TABLE 1-2.1
PLAN DESIGNATION/ZONE DISTRICT CONSISTENCY

PLAN DESIGNATION	CONSISTENT ZONE DISTRICT	CONSISTENT DENSITY
<u>Residential Uses</u>		
Rural	AE-5, AE-20, R-A	0-1.21 Units Per Acre
Low	R-1-A, R-1-AH, R-1-E, R-1-EH	0-2.18 Units Per Acre
Medium-Low	R-1-B, R-1-C R-1-B/PD	2.19-4.98 Units Per Acre
Medium	R-1, MH, R-1-C/PD R-1/PD	4.99-10.37 Units Per Acre
Medium-High	R-2-A, R-2, T-P, R-P*	10.38-18.15 Units Per Acre
High	R-3-A, R-3, R-4+, C-P*	18.16-43.56 Units Per Acre
<u>Commercial Uses</u>		
Neighborhood	C-1, C-L, C-R	
Community	C-2	
Regional	C-3, C-4	
General Heavy Strip	C-5, C-6, C-R	
Office	RP-L, R-P**, C-P** R-P, Planned Office Development C-P, Planned Office Development	
<u>Industrial Uses</u>		
Light	C-M, M-1, M-1-P	
Heavy	M-2, M-3	
<u>Other Uses</u>		
Open Space	0, AE-20	
Agricultural	0, AE-20	

- * In the R-P or C-P zone district, pursuant to a Conditional Use Permit for a planned development, a maximum of 35 percent of the property may be developed with the nonresidential uses permitted in those zone districts.

** In the R-P or C-P zone district, pursuant to a Conditional Use Permit for a planned development, a maximum of 35 percent of the property may be developed with the residential uses permitted in those districts.

+ Thirty or more dwelling units per acre, in the R-4 district only, subject to a Conditional Use Permit.

NOTE: The method and procedure for determining zoning consistency in relation to this plan shall conform to Section 12-403 and Article 6 of the Fresno Municipal Code and any subsequent amendments thereto.

- 1-2.2 The Woodward Park community activity center, generally bounded by Audubon Drive, Friant Road, Fresno Street, Nees Avenue, First Street, Herndon Avenue, and Blackstone Avenue (Figure 1-2.2), shall serve as the focal point of community activity and travel, accommodating highly intensive residential, office, and commercial development including mid-rise structures west of Fresno Street and Friant Road.
- 1-2.3 The Herndon Avenue corridor, generally bounded by the Spruce Avenue (quarter-mile street) alignment, Willow Avenue, Herndon Avenue, and First Street (Figure 1-2.3) serves as an extension of intensive residential, office, and commercial uses that link several community planning areas.
- 1-2.4 Moderately intensive urban development including low, medium-low, medium, and medium-high density residential, small single-story office, neighborhood commercial, school, park, and quasi-public planned uses are to be distributed primarily outside of the identified high-intensity areas.
- 1-2.5 Agricultural uses are designated for the urban reserve area in order to discourage the premature urbanization of agricultural land until such time as urban development is determined appropriate in accordance with adopted plans, policies, and procedures.

FIGURE 1-2.2
Woodward Park Community Planning Area

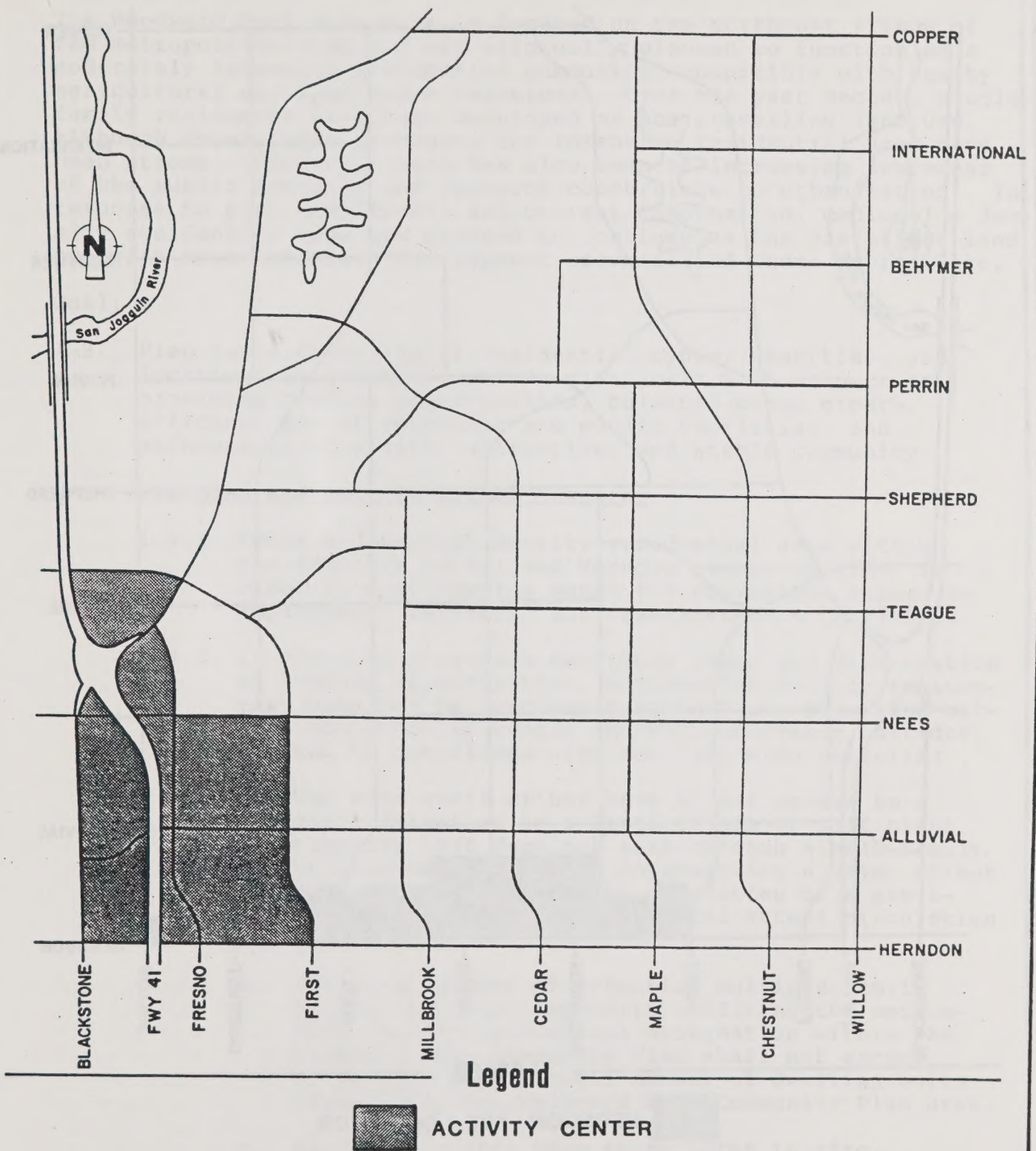
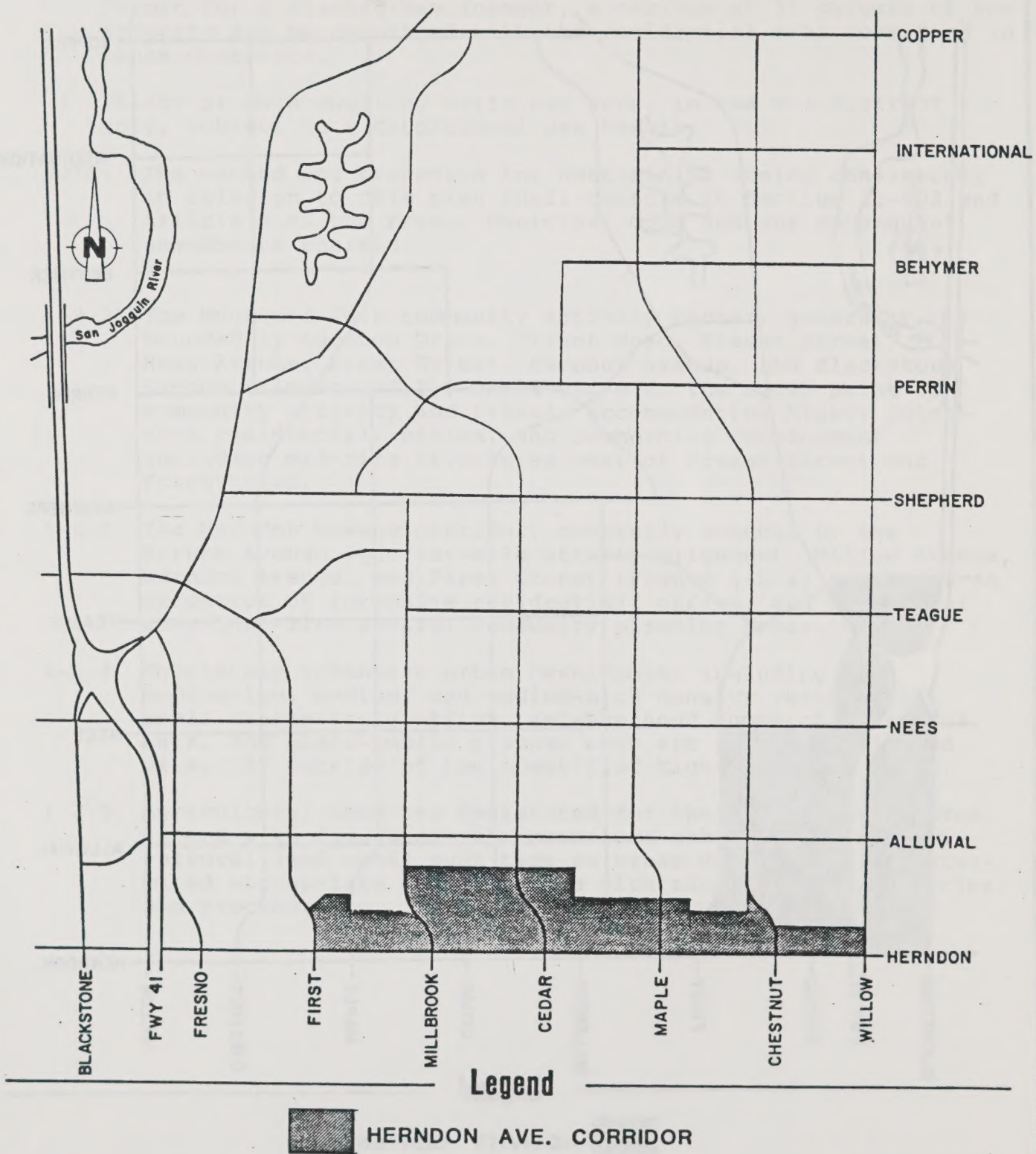


FIGURE 1-2.3
Woodward Park Community Planning Area



Residential Uses

The Woodward Park community is located on the northeast fringe of the metropolitan area and was originally planned to function as a moderately intensive residential community, compatible with nearby agricultural and open space resources. Over the past decade, single-family residences have been developed as the prevailing land use, although development pressures for intensive residential uses have been strong. However, there has also been an increasing awareness of the public facility and resource constraints to urbanization. In response to past commitments and current information, medium-low density residential uses are planned to continue as the prevailing land use with more intensive development accommodated where appropriate.

Goal:

- 1-3. Plan for a diversity of residential types, densities, and locations in order to achieve plan goals with respect to providing housing opportunities, balanced urban growth, efficient use of resources and public facilities, and maintenance of a safe, attractive, and stable community.

Policies and Implementation Measures

- 1-3.1 Focus medium-high density residential uses within the activity center and Herndon Avenue corridor in order to meet housing needs for convenient access to employment, services, and transportation facilities.
- 1-3.2 In order to provide a desirable range and distribution of housing opportunities, medium-high density residential uses may be considered appropriate for sites outside the activity center and Herndon Avenue corridor, subject to compliance with the following criteria:
 - a. The site shall either have direct access to a major street or to a local street of sufficient capacity that does not pass through single-family neighborhoods prior to intersecting a major street and will not prevent the completion of a previously committed or needed local street circulation system.
 - b. The total number of potential multiple-family residential dwelling units utilizing the medium-high density residential designation within the Woodward Park Community Plan shall not exceed 35 percent of the total number of dwelling units planned for the Woodward Park Community Plan area.
 - c. The site is less than three acres in size, exclusive of rights-of-way.

- d. The shape of the site is too narrow or shallow to accommodate local street access to single-family residential lots or the proximity to other uses (the site is bounded on two or more sides by major streets, office or commercial uses) is not conducive to single-family residential uses.
 - e. Assurance that public facilities and services will be provided to accommodate demand increases or characteristics (peak factors, disruptive traffic movements, fire suppression water demands, et al.) in a manner that will maintain an acceptable level of service to the proposed use and surrounding community in accordance with adopted plans, policies, and development standards.
- 1-3.3 Density Transfer. Through the Conditional Use Permit process and as part of a unified project on one parcel or contiguous parcels, the residential density of part of the site may exceed the maximum density allowed by the plan designation -- provided that a portion of the site is developed at less than the maximum density permitted such that the entire project site density does not exceed the maximum density permitted under the applicable plan designation and that the density transfer will not reduce the desirability of surrounding areas for development of planned uses.
- 1-3.4 Mixed use development of a medium-high density residential designated site may be developed using the R-P or C-P zone districts in accordance with the zoning consistency and development standards of the Zoning Ordinance.
- 1-3.5 Medium density residential planned developments are appropriate for those sites that meet some, but not all, of the criteria for medium-high density residential use. An increased density, together with design flexibility, will facilitate the desirable and compatible development of a difficult parcel without reducing the level of service provided by planned public facilities.
- 1-3.6 The medium-low density residential designation shall be the predominant residential land use outside of the activity center and Herndon Avenue corridor.
- 1-3.7 The following dwelling units per acre (gross area excluding major street right-of-way) and persons per household averages shall be used to project population holding capacity and demands upon public services.

TABLE 1-3.7
DWELLING UNITS PER ACRE/PERSONS PER HOUSEHOLD

<u>DESIGNATION</u>	<u>UNITS/ACRE</u>	<u>PERSONS/HOUSEHOLD</u>
--------------------	-------------------	--------------------------

Rural	0.5	2.79
Low	1.5	2.79
Medium-Low	4.5	2.79
Medium	8.0	2.79
Medium-High	15.0	2.01
High	N/A	N/A

1-3.8 The following design guidelines shall be considered for application to all multiple-family residential development entitlements adjacent to land that is designated for single-family residential use. These measures are not prescriptive and may be modified where determined appropriate by the City of Fresno in order to best serve the health, safety, and welfare of the community. These measures may be waived where the adjacent single-family residential designated land is developed with or approved for a nonresidential use.

- a. Outdoor recreational areas, game courts, swimming pools, and solid waste collection areas on properties zoned for multiple-family residential uses shall be oriented away from properties zoned or planned for single-family residential uses.
- b. Parking areas, carports, garages, accessory structures, and access drives shall be separated from abutting properties zoned or planned for single-family residential use with a landscaped setback 15-feet wide in conjunction with a solid masonry wall six-feet high on the property line.
- c. Multiple-family buildings greater than one-story (20 feet) in height shall be prohibited within 75 feet of property zoned or planned for single-family residential use.

Commercial Uses

The plan concept focuses office and commercial development within the activity center and Herndon Avenue corridor in order to take advantage of significant land use, public facility, and transportation attributes. These two areas provide a wide range of commercial and office development opportunities ranging from mid-rise buildings and a regional shopping center to small office complexes and convenience or commuter commercial centers. Outside of these high

intensity areas, office and commercial uses will be located to support the residential character and avoid unanticipated demands upon public facilities.

In order to provide a reliable and consistent basis upon which to make land use decisions, the plan establishes criteria for the amount and location of office and commercial uses according to neighborhood and community needs. These criteria will provide adequate development opportunities to facilitate the economic benefits of a competitive market while promoting neighborhood stability and the efficient distribution of resources.

Goal:

- 1-4. Plan for the appropriate location, size, and intensity of office and commercial developments necessary to meet metropolitan, community, and neighborhood needs in a manner consistent with the plan's concept of urban form and function with the objective of efficiently managing public facilities and resources.

Policies and Implementation Measures

- 1-4.1 Concentrate high intensive office and commercial developments, including mid-rise buildings where permitted by Section 12-321 of the Zoning Ordinance, serving metropolitan or community needs within the identified Woodward Park activity center consistent with that area's office, community, general heavy strip, and regional commercial designations.
- 1-4.2 Accommodate intensive office developments (one- to four-story buildings) serving metropolitan-wide community needs and commercial developments serving community and commuter needs within the Herndon Avenue corridor consistent with the office, community commercial, and neighborhood commercial designations.
- 1-4.3 Distribute a limited amount of moderately intensive commercial and office developments to serve community and neighborhood needs outside of the community's major activity center and Herndon Avenue corridor consistent with the demand factors and location criteria identified as follows:
 - a. Limit the maximum aggregate area of land designated for neighborhood and community commercial uses within the Woodward Park Community Plan to ratios of one acre per 1,000 people and .8 acres per 1,000 people, respectively.
 - b. Limit the maximum aggregate area of land designated for office use by the Woodward Park Community Plan

to a ratio of .5 acres per 1,000 people, excluding the office uses designated within the activity center and Herndon Avenue corridor.

- c. Assure that public facilities and services will be provided to accommodate demand increases or characteristics (peak factors, disruptive traffic movements, fire suppression water demands, et al.) in a manner that will maintain an acceptable level of service to the proposed use and the surrounding community in accordance with adopted plans, policies, and development standards.
- d. Allow commercial uses to be developed only within unified shopping centers with a minimum site area of 2.5 acres located at the intersection of two arterial streets.
- e. Limit commercial uses to a maximum area of 10 acres at an intersection except at the two identified community centers where up to 25 acres may be developed. The total acreage may be distributed between two corners of the intersection.
- f. Limit office uses to structures of one-story (20 feet) in building height with a maximum floor area ratio of 25 percent of the lot area (Fresno Municipal Code Section 12-321-A.5), and to building sites that do not exceed four acres in area located adjacent to existing or planned commercial uses with direct access to a major street. *
- g. Allow the location of day care centers outside of office designated areas on sites that have direct access to a major street and are specifically limited to child day care center use.
- h. Locate new commercial development away from planned schools.

1-4.4 The following design measures shall be considered appropriate for application to office, commercial, and other nonresidential development entitlements adjacent to land that is designated for single-family residential use. These standards are not prescriptive, and may be modified through the development entitlement process in order to best serve the community's health, safety, and welfare or waived where the adjacent land is developed with a nonresidential use or approved for nonresidential development entitlements (zoning, special permit).

* Refer to Resolution No. 2000-329, Appendix A, regarding exception to policy no. 1-4.3-f which was granted for the 1.81 acre parcel at 7525 North Cedar Avenue.

- a. All loading and storage areas shall be screened from view of adjoining property zoned or planned for residential uses by a combination of landscape planting and a solid masonry wall. All loading spaces shall be located not less than 150 feet from the boundary of any residential property; however, the proximity of loading areas may be reduced to not less than 40 feet from the boundary of residential property if the Director of the Development Department or the Planning Commission finds that additional screening and noise attenuating methods have been designed to adequately protect adjoining residential property. All storage shall be within an enclosed structure. Outdoor storage is expressly prohibited.
- b. Roof-mounted and detached mechanical equipment for commercial and office uses shall be screened from view and acoustically baffled to prevent the noise level rating for the equipment from exceeding 55 Ldn measured at the nearest property line.
- c. A landscaped setback 20-feet wide containing deciduous and evergreen trees shall be planted and maintained along the property line between commercial and office uses and abutting properties zoned or planned for residential uses and along abutting local streets provided, however, that this requirement shall not apply to those parcels of land which are one acre or less in size or to parcels larger than one acre subject to Director review and approval of landscape plans.
- d. No commercial or office building shall be constructed within 50 feet of the property line of abutting properties zoned or planned for residential uses.
- e. The following wall and berm treatment shall be required for commercial uses and office uses:
 - (1) A solid masonry wall six feet in height, an earth berm six feet in height or any combination of solid masonry wall and earth berm which provides a continuous barrier six feet in height, shall be erected on or along the property line between properties zoned or planned for commercial and office uses and properties zoned or planned for residential uses.

- (2) A solid masonry wall three and one-half feet in height, an earth berm three and one-half feet in height or any combination of solid masonry wall and earth berm which provides a continuous barrier three and one-half feet in height, shall be erected on or along the setback line 20 feet from and parallel with the right-of-way line of abutting local streets.
- (3) Earth berms shall be planted with grass or ground cover and maintained by the property owner.
- f. The provisions of the approved commercial or office district shall apply to outdoor advertising for commercial and office uses, excepting freestanding signs in a commercial district, wherein there shall be permitted one freestanding sign containing the name of buildings and occupants or groups thereof, and shall be not more than 125 square feet in area and not more than 20 feet in height, and shall not be located within any required landscaped setback or landscaped transition setback area.
- g. Within an area 100 feet wide abutting property zoned or planned for residential use, exterior area lighting for parking areas, carports, garages, access drives, and loading areas for commercial and office uses shall be shielded to prevent line of sight visibility of the light source from abutting property zoned or planned for residential use.

Industrial Uses

The Woodward Park Community Plan contains no provisions for the standard light industrial-type use, whether it be light manufacturing or warehousing. Industrial needs have been more than met in the Pinedale area, in the City of Clovis, and in the City of Fresno's Enterprise Zone. The plan does, however, recognize the existence of certain agricultural and resource recovery-related activities which would normally fall into the industrial zoning classification and provides for their continued existence. Specific industrial uses falling into this category would be packing sheds, cold storage facilities, and sand and gravel recovery operations.

Goal:

- 1-5. Accommodate industrial activities that support agricultural and resource recovery uses and do not stimulate unplanned growth or premature conversion of agricultural and open space land to urban use.

Policies and Implementation Measures

- 1-5.1 Industrial activities shall be permitted only accessory to agricultural uses in accordance with the "AE-20" and "AE-5," Exclusive Agricultural Zone Districts, and the "0," Open Space Zone District.

Public and Quasi-Public Uses

This plan has established a new land use designation designed to encompass those public and quasi-public uses such as government-owned facilities, large churches, and schools. This designation has been created to provide for the more efficient use of public services, to enhance land use compatibility, and to allow for the identification of potentially major traffic generators. More specifically, by removing the traditional underlying residential land use designation normally used for these uses, substantial savings in the areas of sewer capacity and water services may be realized.

Goal:

- 1-6. Guide the location and intensity of public and quasi-public uses to support the planned urban form, relationship of land uses, and community identity.

Policies and Implementation Measures

- 1-6.1 Governmental and public utility and other quasi-public service offices should be limited to local facilities serving the immediate surrounding community and located within the community's activity center area or Herndon Avenue corridor.
- 1-6.2 Public schools should be encouraged -- and private schools required -- to locate with vehicular access directly onto a major street, and pedestrian access oriented to a controlled major street intersection or the quarter-mile point along a major street.
- 1-6.3 Places of worship shall be located in accordance with the criteria applicable to multiple-family residential uses (Policy 1-3.2.a, c, d and e). For sites in excess of three acres, a plan amendment designating the property for quasi-public facility use shall be required; but in any event, it must still conform to the requirements of Policy 1-3.2 a, d and e.

OPEN SPACE AND CONSERVATION

Public Parks, Recreation and Conservation Areas

It is the intent of this section to guarantee the preservation of the Woodward Park community's open space resources, to manage its

mineral resources, and to facilitate the area's current and future recreation needs. Open space planning is important in that not only does it provide protection for valuable mineral deposits and sensitive environments threatened by urbanization as well as protection from potential hazards such as flooding, but because it also provides for the psychological well-being of the community by offering an opportunity for relaxation and a change of pace from daily tasks. Through planning, open space resources can be organized to meet the community's needs for hiking, jogging, fishing, relaxation, and other recreational pursuits.

The open space element of this plan seeks to specifically provide for the continued expansion of the Woodward Regional Park as a passive park and bird sanctuary, the preservation of the San Joaquin Riverbottom, the development of neighborhood parks, and the implementation of a system of hiking and jogging trails, bike paths, and equestrian trails. It further seeks to ensure positive coordination with the Clovis Unified School District to maximize the availability of open space resources.

Goal:

- 2-1. Provide for the continuing development of a public park system that promotes the community's park and recreation needs at varying levels.

Policies and Implementation Measures

- 2-1.1 The public park system shall be classified as follows, to be developed in accordance with the standards specified in the City's Master Plan of Parks, Facilities, Recreation, and Community Services:

Mini Parks (Pocket Parks) - Small (less than one acre) parks located near higher density development when adequate open space and recreational opportunities within the project area are not available.

School Grounds/Play Fields - School sites comprise a large inventory of recreational open space areas providing recreational space for organized activities such as soccer, youth baseball, tennis, exercise, and gym areas.

Neighborhood Parks - A passive park, five to ten acres in area, designed to serve residents living within a one-mile radius of the site or between 10,000 and 15,000 residents.

Community Parks - This park services an area within a two to four-mile radius of the site, and serves a population of between 50,000 and 80,000 residents.

It has lighted sport fields and specialized equipment not found in a neighborhood park.

The community park is the nucleus of the park system where members of the community congregate for area-wide functions or programs. At the heart of the park is the community center of 25,000 to 30,000 square feet, which provides at least the following facilities and services:

- a. Gymnasium (with men's and women's showers and lockers).
- b. Multipurpose room.
- c. Meeting rooms.
- d. Senior's activity center.
- e. Administrative offices.
- f. Snack bar and kitchen facilities.

Regional Parks - Regional parks are developed to serve residents living within each quadrant of the City. The park serves a population of approximately 100,000 residents, with a size of generally 100 or more acres. The regional park offers nonprogrammed nature-oriented recreational opportunities. Improvements include picnic shelters, hiking trails, lakes, streams, public gardens, and facilities not normally located in an urban setting.

Ponding Basins - The Fresno Metropolitan Flood Control District (FMFCD) provides many open space opportunities through the public use of recharge facilities that the FMFCD maintains as open play fields. There are currently three neighborhood parks in the City located within basin areas, with several more large basins turfed by FMFCD. Because the FMFCD has a continual funding source for attaining new basins and a good working relationship with the City, it is likely that basins will continue to provide important open space areas.

- 2-1.2 The City of Fresno's public park program for the Woodward Park community should adhere to the following standards:

TABLE 2-1.2
CITY OF FRESNO
RECOMMENDED PARK STANDARDS

PARK TYPE	ACRES/ 1.000	SIZE RANGE	POPULATION SERVED	SERVICE AREA
Playfield/ Schoolground	-----	1-2.5 ac.	3-5,000	1/4-1/2 mi.
Neighborhood	0.75	5-10 ac.	10-15,000	1/2-1 mi.
Community	0.25	15-20 ac.	50-80,000	2-4 mi.
Regional	2.00	100+ ac.	100,000	1/2 hr. drive
TOTAL	3.00			

2-1.3 Neighborhood parks shall be established at the locations designated on the community plan map and shall be funded by UGM fees. When there is 95 percent funding of the UGM district, the park shall be built within two years.

2-1.4 Encourage the Fresno Metropolitan Flood Control District to landscape and fully improve existing and future designated ponding and any designated recharge facilities for the aesthetic benefit of the community at large. In any event, the City shall encourage that portion of each facility which is visible from an adjacent street frontage to be landscaped.

2-1.5 In urban areas where space is unavailable for a park site, the City shall pursue the development of public jogging trails/bike paths, to be developed adjacent to public streets and to be a minimum width of 15 feet (measured from the adjacent curb face), of which eight feet must be paved with asphaltic concrete, said development to be the responsibility of the underlying property owner (see illustration in Appendix).

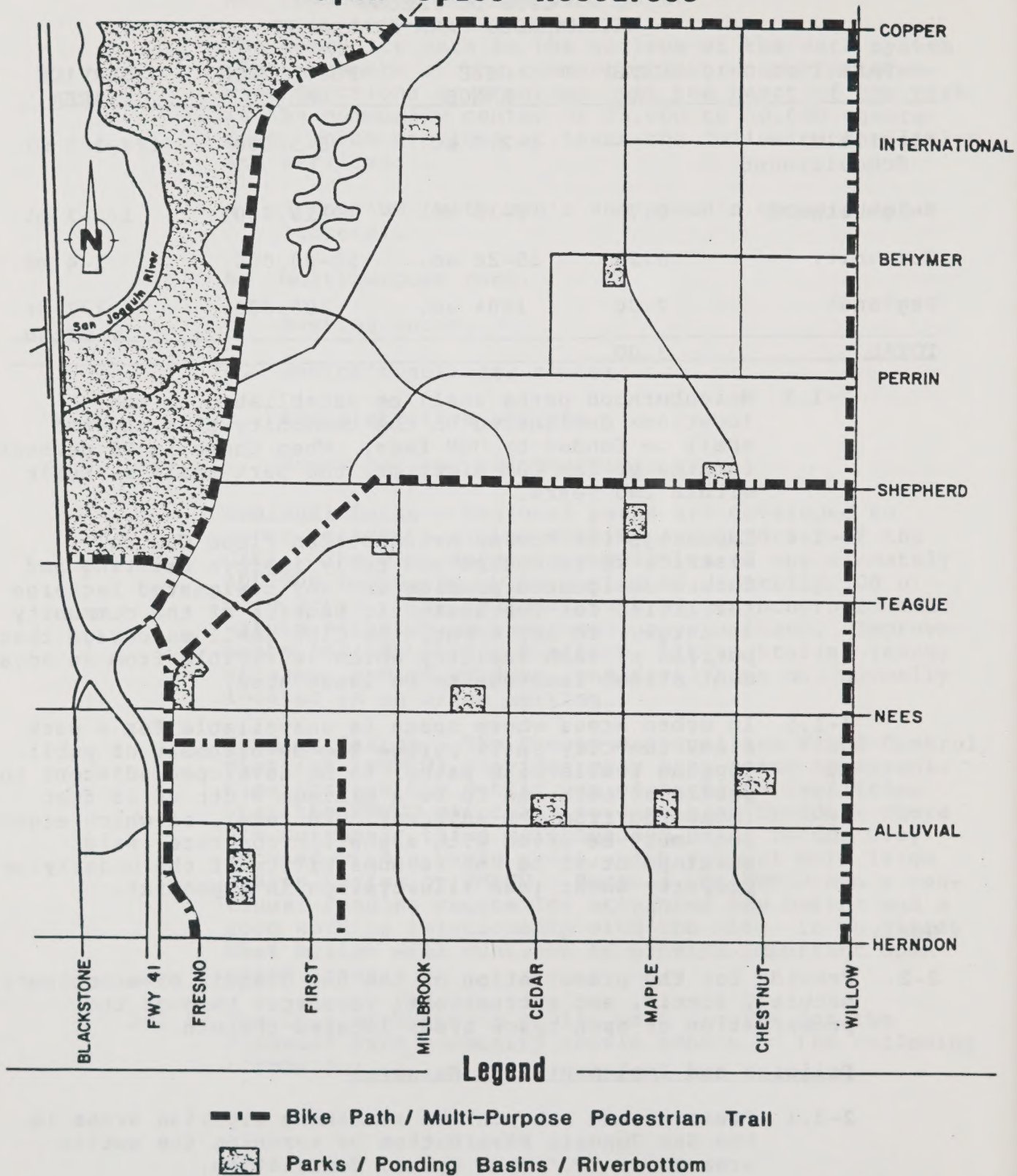
Goal:

2-2. Provide for the preservation of the San Joaquin Riverbottom's natural, scenic, and recreational resources through the preservation of open space areas located therein.

Policies and Implementation Measures

2-2.1 Preserve and enhance the remaining riparian areas in the San Joaquin Riverbottom by rezoning the entire area to an "0," Open Space, designation.

FIGURE 2-1 Woodward Park Community Planning Area Open Space Resources



- 2-2.2 Urge the State Lands Commission to determine the extent of public ownership and public trust interest in the riverbottom.
- 2-2.3 Support the concept of a river parkway system for the riverbottom in coordination with Fresno County, Madera County, public interest groups, property owners and the State of California.
- 2-2.4 Support the expansion of the Woodward Regional Park into the riverbottom.
- 2-2.5 Establish the San Joaquin bluffs/river trail as part of a river parkway concept.
- 2-2.6 Require that the bluff vista points designated in this plan are developed in accordance with the specific standards set forth in the Appendix of this plan.
- 2-2.7 Maintain and enforce the requirements of the "BP," Bluffs Preservation Overlay District.
- 2-2.8 Allow for the extraction of the sand and gravel resources in the riverbottom in conformance with the Surface Mining and Reclamation Act and existing Conditional Use Permits.
- 2-2.9 Limit recreation uses within the San Joaquin Riverbottom and bluffs to activities such as hiking, fishing, horseback riding, picnicking, and camping that infringe minimally on natural vegetation and wildlife.
- 2-2.10 Complete studies addressing the limitations of the area's biotic community and hydrological status prior to the approval of any project in the San Joaquin Riverbottom.
- 2-2.11 Encourage the Fresno Metropolitan Flood Control District to actively monitor the impacts of storm water discharge into the San Joaquin River. Discharge of runoff from commercial or industrial land uses shall be prohibited.
- 2-2.12 Prohibit the location of any solid waste facilities of any type and/or transfer stations in the riverbottom.

Goal:

- 2-3. The City of Fresno shall provide for the conservation of

significant mineral resources located within the boundaries of the Woodward Park community while protecting the natural environment and surrounding uses from the adverse effects of mineral extraction operations.

Policies and Implementation Measures

- 2-3.1 Provide for the conservation of significant mineral resources by cooperating with the County of Fresno and the State of California in identifying and mapping areas containing these deposits.
- 2-3.2 Prohibit the development of land uses that preclude mineral extraction within existing or potential surface mining areas, as identified in the Conservation Element of the City's General Plan.
- 2-3.3 Develop and maintain maps and descriptions of potential mineral and energy resources as a basis for policy and program implementation.
- 2-3.4 Document current sand and gravel quarries, including the status and duration of existing permits and approvals, to avoid near-term land use conflicts and provide a basis for compliance monitoring.
- 2-3.5 Support local mapping and research programs of the California Division of Mines and Geology and federal agencies that locate and describe mineral and energy resource deposits.
- 2-3.6 Cooperate with governmental agencies and educational institutions to arrange for the development and exchange of information on mineral resources.
- 2-3.7 Establish buffer zones of compatible uses (such as industry and agriculture) adjacent to mineral resource zones.
- 2-3.8 Require discretionary approval for specific development proposals for mineral extraction.
- 2-3.9 Pursue the procedures and requirements of the California Environmental Quality Act to minimize land use conflicts and reduce environmental impacts of all proposed resource extraction operations.
- 2-3.10 Design resource extraction operations to maintain the integrity of areas of "high environmental quality" and of scenic areas designated by the City.

- 2-3.11 Require all mineral extraction permits to be predicated on appropriate reclamation plans that meet the standards of the City, the State Mineral and Reclamation Act, and the implementing guidelines of the State Mines and Geology Board. Reclamation/restoration of the sites shall be done as each phase of development or extraction is completed.

Goal:

- 2-4. Provide adequate on-site usable open space for individual residential projects.

Policy and Implementation Measure

- 2-4.1 Require a minimum of 25 percent of the net area of a multiple-family residential or cluster planned development site to be developed as usable open space. Usable open space is defined as being easily accessible to the units served, clustered to provide adequate space for passive usage (i.e., by children for unstructured play, adult conversations, walking, sitting, etc.), and landscaped in a manner that is conducive to its use. The 25 percent calculation of usable open space may include private yard/patio space and community water features, but shall not include required building setbacks, driveways, and parking area.

Goal:

- 2-5. Preserve prime agricultural lands and protect existing farming operations from encroaching urbanization.

Policies and Implementation Measures

- 2-5.1 Preserve prime farmland for continued agricultural use to the fullest extent feasible consistent with the protection of the environment, public safety and well-being, and the planned, orderly, efficient development of the urban area.
- 2-5.2 Encourage project development proposals that result in the in-filling of existing urban areas, including small parcels of farmland that have become surrounded by urban or industrial uses.
- 2-5.3 The boundaries for planned urban uses shall be drawn

as straight as circumstances permit in order to eliminate "peninsular effects" (i.e., intrusions of farmland into urban areas or vice versa).

- 2-5.4 Continue to recognize the agricultural preserve contracts (i.e., Williamson Act) and promote the enrollment of all prime farmland within its domain that remains outside of its anticipated urban growth area. The City should assist eligible landowners in becoming aware of the Act, preparing contracts, and securing tax benefits. Scenic or resource conservation easements should be explored as a suitable means for protecting prime farmland that is located adjacent to residential areas and where the property does not qualify for inclusion in the agricultural preserve program.

Scenic Vistas

The Woodward Park Community Plan area's location along the San Joaquin River, near the Sierra Nevada Mountain Range, provides opportunities for scenic vistas and visual quality which is unique to the Fresno Metropolitan Area. Although scenic vista points have not been previously identified within the Woodward Park Community Plan, public ownership of the bluff top area and existing vehicular access points facilitate its establishment. These vista points would accommodate limited public access in order to allow passive recreational enjoyment of the panoramic views.

Goal:

- 2-6. Provide opportunities for the public's visual enjoyment of the unique scenic qualities of the San Joaquin River's riparian environment and the alpine vistas of the Sierra Nevada Mountain Range.

Policies and Implementation Measures

- 2-6.1 Develop a minimum of two vista points along the San Joaquin River Bluff.
- 2-6.2 Encourage the preservation and enhancement of eastward-oriented vistas in the designing of residential streets and open space features (such as east-west street alignments which are also compatible with State Subdivision Map Act design requirements to facilitate passive heating and cooling opportunities).
- 2-6.3 Implement designated recreation trails and bikeways linking open space features of the community plan to facilitate access to, and enjoyment of, these passive recreational opportunities.

Equestrian Trails

An equestrian trail system is proposed for the planning area that would provide for the location of a combination horse/pedestrian trail system in the San Joaquin Riverbottom, another along a substantial portion of the Southern Pacific Railroad line running from Fresno Street and Nees Avenue to Shepherd and Willow Avenues, and a continuous trail along the planning area's northern and eastern fringes to be developed in a manner that would allow for future connections to the City of Clovis's planned equestrian trail system. These multipurpose trails, approximately 25 feet in width, must allow for a nine-foot clearance aboveground and for the development of a suitable composite surface that can accommodate both equestrian and pedestrian traffic. In addition, provisions for staging (horse trailer parking) and watering areas should also be encouraged.

Goal:

- 2-7. Provide for the development of a comprehensive equestrian trail system within the Woodward Park community that is free from conflict with vehicular traffic.

Policies and Implementation Measures

- 2-7.1 Implement an equestrian multipurpose trail in the riverbottom area.
- 2-7.2 Provide for an equestrian trail along Copper and Willow Avenues that would link the planned City of Clovis equestrian trail system to the proposed San Joaquin River trail system.
- 2-7.3 Ensure that equestrian trails are compatible with pedestrian right-of-ways.
- 2-7.4 Evaluate the feasibility of using utility easements for the development of future equestrian trails.
- 2-7.5 Plan for the utilization of the Southern Pacific Railroad line as a possible equestrian trail should that railroad be abandoned.
- 2-7.6 Provide for the development of staging (horse trailer parking) and watering areas periodically along each trail.
- 2-7.7 Explore use of the Enterprise Canal as an equestrian trail.

CIRCULATION

Streets and Highways

In the City of Fresno, major streets are normally planned on an alternating grid basis, with collector and arterial streets spaced at half-mile intervals and relieved on an irregular basis by existing expressways and Freeways 99 and 41. In the Woodward Park area, the normal grid system is incomplete primarily due to the proximity of the San Joaquin River and previous land use decisions.

Because of this, much of the traffic generated in the community will be forced to utilize either the Freeway 41 corridor or Cedar Avenue to access the rest of the metropolitan area. In order to minimize the resulting potential for increased congestion, the area's circulation system has been redesigned to direct traffic away from North Cedar Avenue toward three points: (1) the future Freeway 168; (2) Herndon Avenue and Freeway 41; (3) Friant Road and Freeway 41; and to interface with a designated future transit corridor located adjacent to and parallel with Freeway 41.

Existing transit facilities would be centered near the proposed regional center, where possible, providing the basis for an expanded transit system in the area. Finally, conflicting land use patterns along Herndon Avenue and Friant Road, where property remains undeveloped, would be redesignated to avoid unnecessary congestion and potential vehicular gridlock.

Goal:

- 3-1. Provide for a safe and efficient street system that promotes the efficient movement of people and goods throughout the Woodward Park area.

Policies and Implementation Measures

- 3-1.1 The public street system shall be classified, as follows, with development to occur in accordance with adopted Public Works standards.

Freeway - Provide service to through-traffic exclusively, with no access to abutting property and no at-grade intersections.

Expressways - Provide service to through-traffic via four or six-lane divided roadways with no access to abutting property. Utilizes at-grade intersections.

Super Arterial - Six-lane divided roadway with no full-median breaks permitted between the half-mile points,

being characterized by limited access from abutting properties, whose primary purpose is to move traffic in and out of the plan area.

Arterials - Four to six-lane divided roadway, with limited access to abutting properties, whose primary purpose is to move traffic in and out of the plan area.

Collectors - Four-lane undivided roadway, whose primary function is to connect local streets with arterials and to provide access to abutting properties.

Locals - Utilized exclusively for property access with through-traffic actively being discouraged.

- 3-1.2 Design local residential streets to discourage through and/or nonresidential traffic.
- 3-1.3 Where two classified streets (e.g., arterial and collector) form a "T" intersection, a local street shall not be the fourth leg of the intersection.
- 3-1.4 Promote a level of Service "D" as the maximum acceptable level of congestion on all public streets within the Woodward Park area.
- 3-1.5 Prior to the approval of any development north of International Avenue, between North Millbrook and Maple Avenues, a comprehensive local street system shall be plan lined with direct links to Millbrook, Copper, Maple, and International Avenues.

Goal:

- 3-2. Protect and enhance the carrying capacity of all major streets within the planning area.

Policies and Implementation Measures

- 3-2.1 Space and coordinate traffic signals to minimize vehicular delay.
- 3-2.2 Provide additional right-of-way and pavement width to accommodate turn lanes at intersections in accordance with Department of Public Works standards.
- 3-2.3 New single-family residential lots shall not be allowed to front on a major street unless it can be satisfactorily demonstrated that no feasible alterna-

tive means of access can be provided to the property. Evaluation of alternative means of access shall include the consideration of frontage roads, backup treatment, and substantial redesign of the subdivision proposal.

- 3-2.4 Full-median breaks on arterials may be provided only at quarter, half, and one-mile intersections, to be developed with left-turn lanes at each break.
- 3-2.5 Consider the construction of grade separations for all expressway intersections unable to meet an "E" level of service.

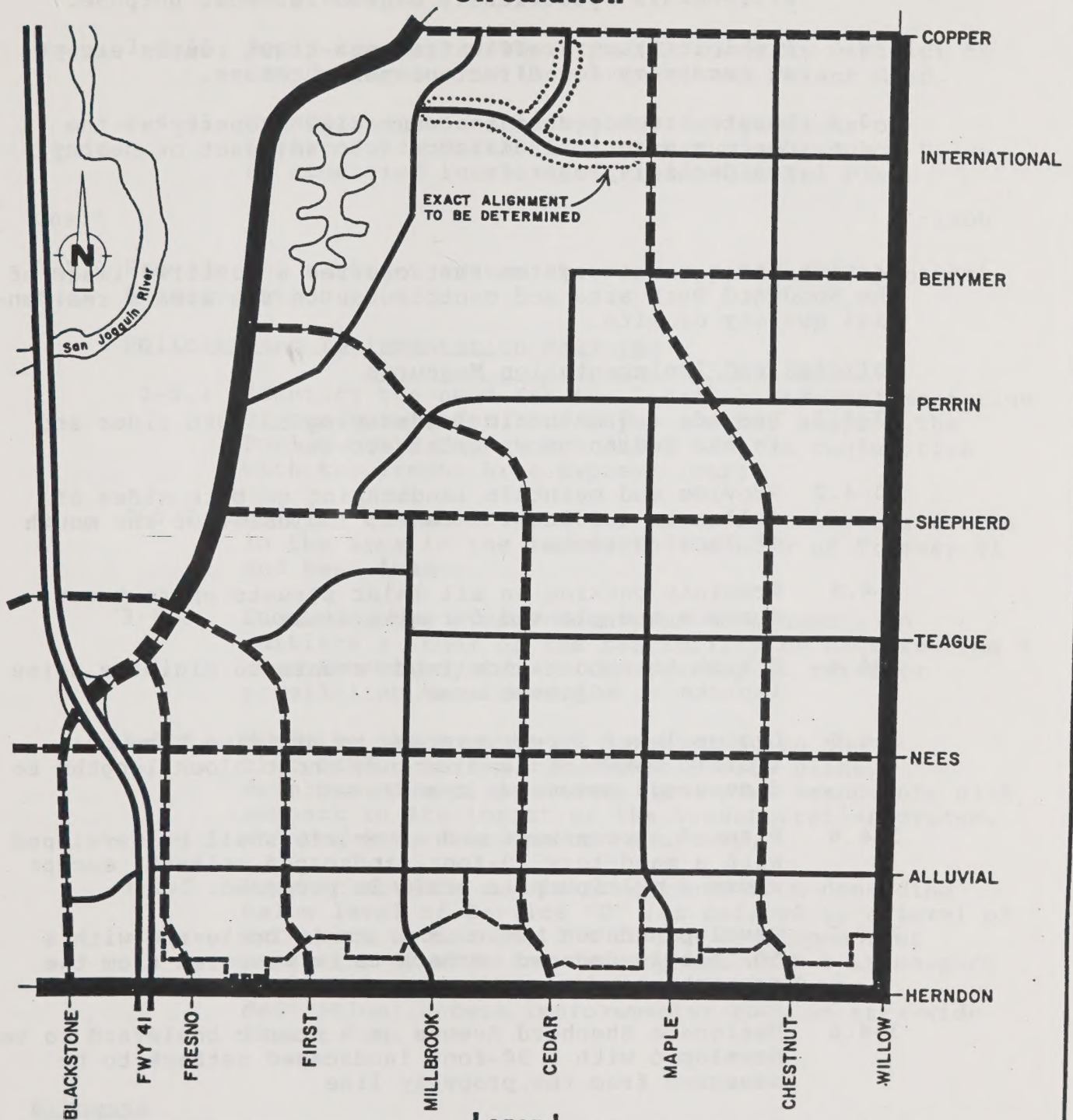
Goal:

- 3-3. Minimize the impact of commercial and through-traffic on the Woodward Park area's circulation system and on sensitive land uses.

Policies and Implementation Measures

- 3-3.1 Minimize the number of driveway access points on all major streets to protect traffic flows.
- 3-3.2 Retail commercial development at the intersection of an expressway and a major street shall gain access to the major street at least one-eighth (1/8) of a mile from the intersection. Signalized access shall be located no closer than a quarter of a mile from an expressway, except as modified by a specific traffic study or environmental impact report.
- 3-3.3 Prohibit the approval of additional commercial development on expressways beyond that already planned in order to protect that classification of streets important for a metropolitan-wide traffic-carrying role.
- 3-3.4 Require mitigation measures to lessen the effect of traffic noise along expressways on adjacent residential property for all new residential uses (pursuant to the Noise Element of the General Plan, Title 24 of the California Administrative Code and the Expressway Overlay District, Section 12-224 of the Fresno Municipal Code) and encourage such measures for existing residential property to the extent feasible.
- 3-3.5 Design access to collectors and arterials from commercial and office uses to minimize traffic disruption.

FIGURE 3-1 Woodward Park Community Planning Area Circulation



Freeway

Expressway

Super Arterial

Legend

Arterial

Collector

Herndon corridor
local street

- 3-3.6 Limit designated truck routes to arterials and expressways specifically signed for that purpose.
- 3-3.7 Prohibit truck traffic from non-truck routes except as necessary for direct property access.
- 3-3.8 Locate truck access to commercial property at the maximum practical distance from adjacent or nearby residential properties.

Goal:

- 3-4. Provide for a street system that creates a positive image of the Woodward Park area and contributes to the area's residential quality of life.

Policies and Implementation Measures

- 3-4.1 Provide and maintain landscaping on both sides and in the median of arterial streets.
- 3-4.2 Provide and maintain landscaping on both sides of collector and local streets, inclusive of the mouth of local streets.
- 3-4.3 Prohibit parking on all major streets where these streets are planned for bike lanes.
- 3-4.4 Design transportation improvements to minimize noise impacts on adjacent uses.
- 3-4.5 Design local street systems to minimize through-traffic movements and include short block lengths to discourage excessive speeds.
- 3-4.6 Planned expressways and arterials shall be developed with a mandatory 20-foot landscaped setback, except where a multipurpose trail is proposed.
- 3-4.7 Develop Audubon Drive as a scenic boulevard with a 50-foot landscaped setback to be measured from the property line
- 3-4.8 Designate Shepherd Avenue as a scenic boulevard to be developed with a 30-foot landscaped setback to be measured from the property line.
- 3-4.9 Designate Millbrook Avenue, between Copper Avenue and Fort Washington Road, a scenic boulevard wherein the

existing eucalyptus grove and landscape patterns will be preserved.

- 3-4.10 Apply the Expressway Area (EA) Overlay District to Herndon Avenue, Willow Avenue, and Friant Road.
- 3-4.11 Recognize the scenic highway designations of Friant Road, North First Street, and Audubon Drive, as specified in the 1984 Fresno General Plan.

Goal:

- 3-5. Provide for a street system that is supportive of public transportation.

Policies and Implementation Measures

- 3-5.1 Identify the need for the location and implementation of bus turn lanes, bus bays, and bus stops. The Public Works Department shall work in conjunction with the Fresno Area Express (FAX).
- 3-5.2 Develop a transit terminal to focus transit services in the area in the immediate vicinity of Freeway 41 and Nees Avenue.
- 3-5.3 Encourage the Fresno County of Governments to initiate a study of the feasibility of constructing a mass transit system in the Freeway 41 corridor paralleling the freeway.
- 3-5.4 Minimize the impacts of development on the circulation system. Review all site plans, development entitlements, and plan amendments with respect to its impact on the transportation system, and require revisions as necessary.
- 3-5.5 Prevent streets and intersections from degrading below level of Service "D" (as defined in a level of service ordinance) due to new development or expansion of existing development with a three-part mitigation program: adjacent right-of-way dedication; access improvements; and, an area-wide impact fee.

Bikeways

In order to provide a continuous and well-integrated bikeway system

linking open spaces and major public uses, the Woodward Park Community Plan directs the implementation of bikeways along all major streets. These bikeways are to be implemented primarily as bike lanes along the outside edges of the street pavement. Where an additional ten feet of street width is not provided, this will necessitate the prohibition of on-street parking. However, it must be recognized that future increases in traffic volumes and congestion due to increasing urbanization or overintensified development of major street intersections could generate competing demands for use of available street width.

Goal:

- 3-6. To provide a continuous and easily accessible bikeway system within the Woodward Park Community Plan area.

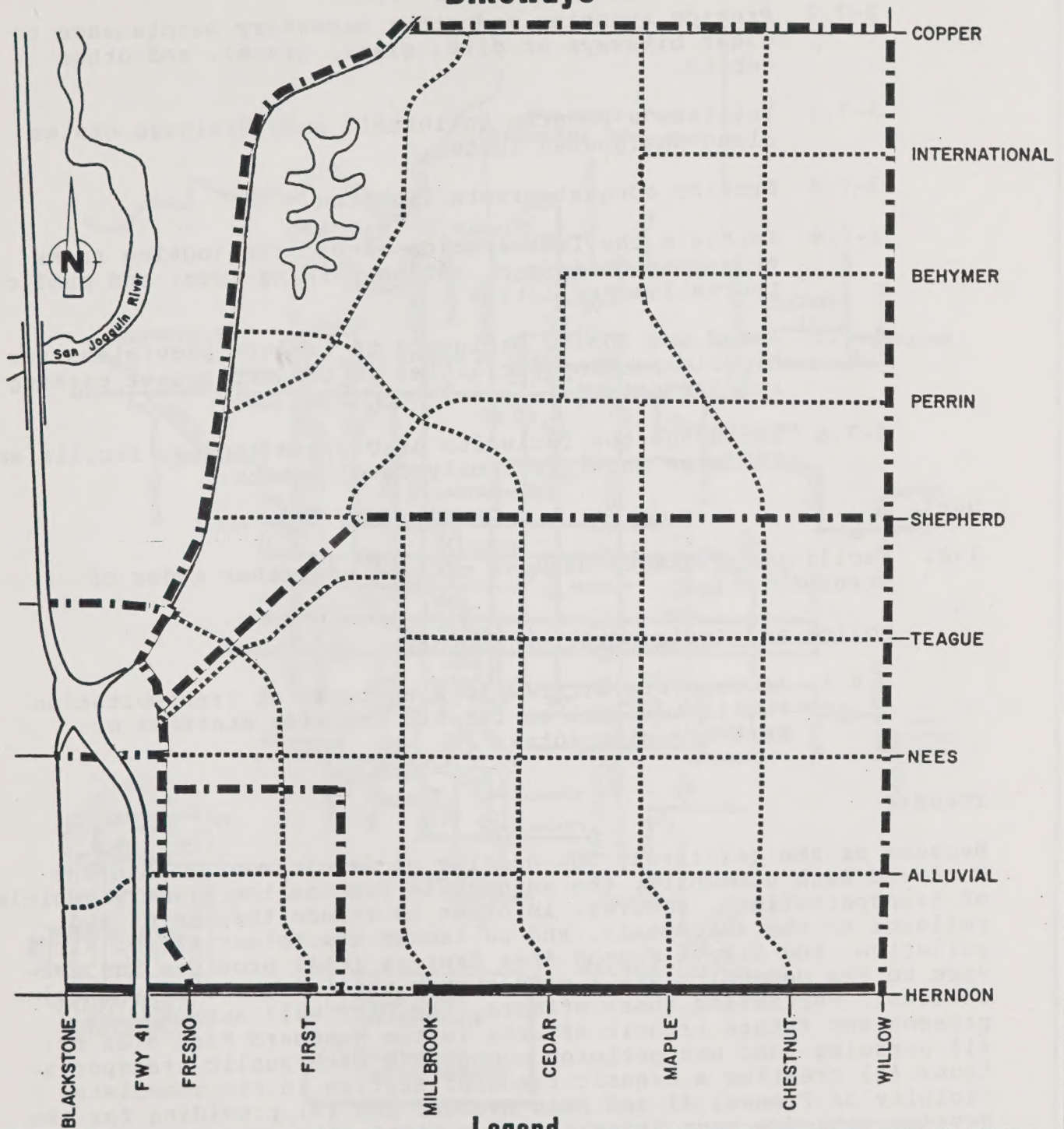
Policies and Implementation Measures

- 3-6.1 Develop a continuous bikeway system that provides linkages to other bicycle facilities and access to major traffic generators such as commercial centers, school, recreational areas, and major public facilities.
- 3-6.2 Provide geographical coverage of the Woodward Park community with a bikeway system developed generally at half-mile or less intervals.
- 3-6.3 Require, as a condition of approval of new development adjacent to designated bikeways, that the bikeway be provided.
- 3-6.4 Provide not less than ten feet of street width to implement bike lanes for designated bikeways unless impractical due to previous street improvements, and provide adequate easement and improvements to implement separate bike paths where designated by the bikeways plan.

Goal:

- 3-7. Maintain bicycle facilities so that they are safe and secure.

FIGURE 3-6 Woodward Park Community Planning Area Bikeways



Legend

- — — Bike Path / Multi-Purpose Pedestrian Trail
- Bike Path
- Bike Lane

Policies and Implementation Measures

- 3-7.1 Provide sweeping and other necessary maintenance to clear bikeways of dirt, glass, gravel, and other debris.
- 3-7.2 Initiate a program to install safe drainage grates along designated routes.
- 3-7.3 Provide adequate route lighting.
- 3-7.4 Initiate the installation of bicycle locking racks at public buildings, public parking lots, and public recreation facilities.
- 3-7.5 Amend the Zoning Ordinance to include provisions for bicycle parking facilities in the off-street parking requirements.
- 3-7.6 Encourage the inclusion of bicycle locking facilities in large multiple-family developments.

Goal:

- 3-8. Facilitate linkages between cycling and other modes of transportation.

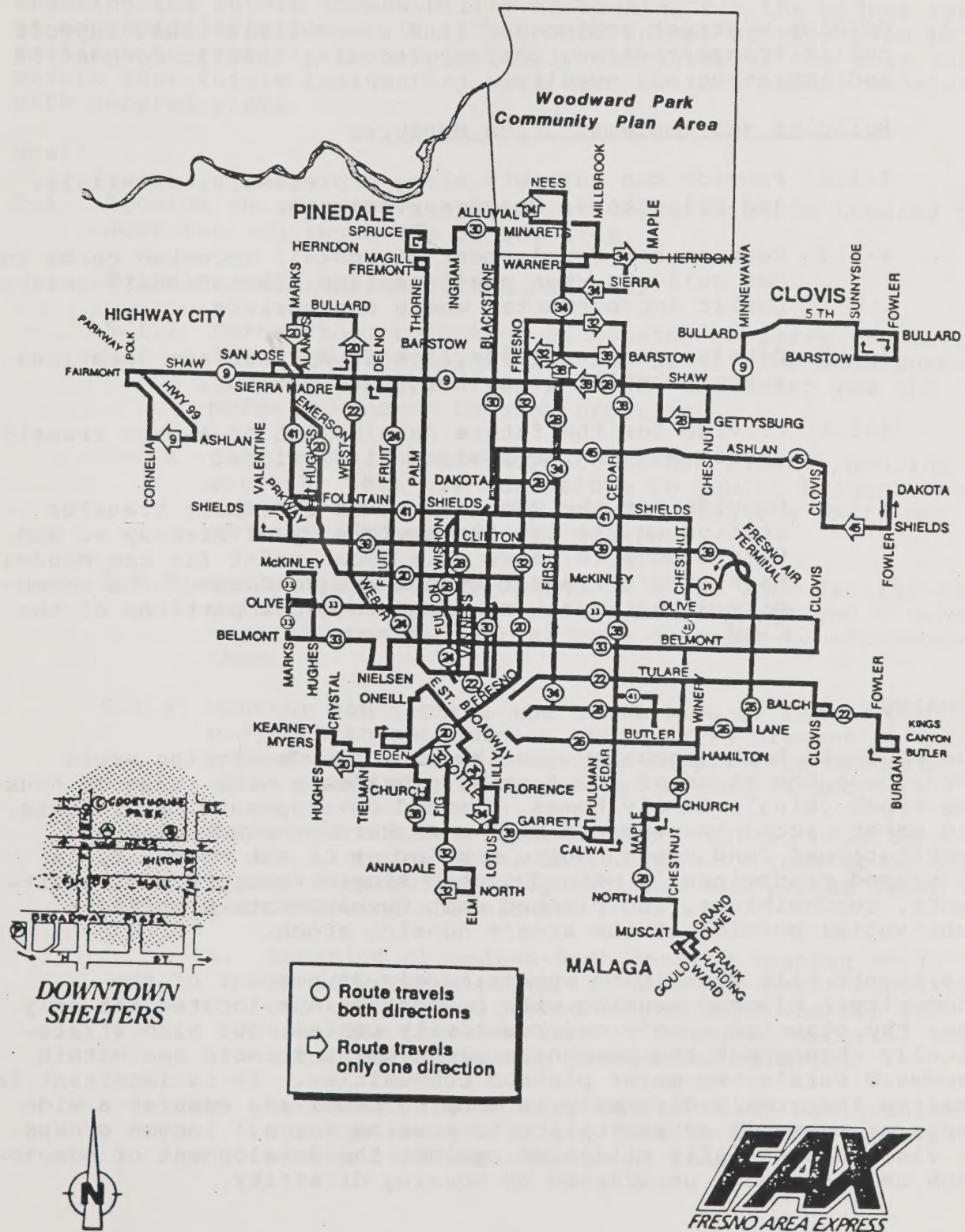
Policy and Implementation Measures

- 3-8.1 Incorporate bicycle locking racks at transportation facilities such as transit transfer stations or park-and-ride lots.

TRANSIT

Because of the relatively low density of development within the Woodward Park community, the automobile remains the primary vehicle of transportation. However, in order to reduce the use of and reliance on the automobile, and to lessen the potential for air pollution, the City's Fresno Area Express (FAX) provides bus service to the community via a grid system utilizing the City's major streets. Furthering these efforts, the City will augment its present and future transit efforts in the Woodward Park area by: (1) pursuing land use patterns compatible with public transportation; (2) creating a transit transfer station in the immediate vicinity of Freeway 41 and Nees Avenue; and (3) providing for the development of a mass transit system within the Freeway 41 corridor.

FIGURE 4-1 Woodward Park Community Planning Area FAX Bus Routes



FAX
FRESNO AREA EXPRESS

Goal:

- 4-1. Develop a street system and land use policies that support public transportation, thereby reducing traffic congestion and improving air quality.

Policies and Implementation Measures

- 4-1.1 Provide bus turnouts along expressways, arterials, and collectors, where appropriate.
- 4-1.2 Require new development to install indented curbs for bus pullouts, bus shelters, and other transit-related public improvements, where appropriate.
- 4-1.3 Develop park-and-ride lots at appropriate locations to support public transit and car-pooling.
- 4-1.4 Provide for the future development of a mass transit system within the Freeway 41 corridor.
- 4-1.5 Provide for the development of a transit transfer station in the immediate vicinity of Freeway 41 and Nees Avenue to serve as a focal point for the Woodward Park area's transit system and to connect the community with transit services to other portions of the City.

HOUSING

The Woodward Park community, unlike many new developing areas throughout the state of California, provides a wide range of housing types (single-family homes, planned developments, apartments, and estate lots) interspaced with a mixture of commercial and institutional land uses. While a majority of the community is developed predominantly with detached single-family homes, apartments, condominiums, and planned unit developments comprise a substantial portion of the area's housing stock.

Apartments will constitute approximately 35 percent of the community's planned housing with concentrations located not only near the planning area's major activity center, but also strategically throughout the community along major streets and within Woodward Park's two major planned communities. It is important to realize the area's diversity in housing densities ensures a wide range of economic accessibility to housing for all income groups. It also substantially mitigates against the development of monotonous neighborhoods unrelieved by housing diversity.

It is the intent of this plan to continue to promote this diversity in housing stock by providing for a range of densities, thereby ensuring the future accessibility to housing for the widest range of economic lifestyles. It is also the intent of this plan to continue to protect the single-family character of the area and to ensure that future residential uses develop in a manner consistent with adopted plans.

Goal:

- 5-1. Provide an adequate supply of sound, affordable housing to meet the housing needs of the area.

Policies and Implementation Measures

- 5-1.1 Foster the production of housing to serve the entry level housing market for the first-time home buyer through mortgage revenue bonds and other low and moderate-income housing programs.
- 5-1.2 Facilitate the development of new elderly housing projects that are accessible to public transportation and services. Elderly housing projects shall not be converted to nonelderly housing.
- 5-1.3 Encourage the development of child care facilities coincident with new housing development and a noncommercial, nonresidential zone district to accommodate them.
- 5-1.4 Monitor and control the conversion of rental housing projects to condominium projects to prevent an imbalance in the rental-ownership supply from becoming acute (less than five percent rental vacancy).
- 5-1.5 Encourage the development of a balanced housing stock in the planning area, including a variety of housing types, ownership configurations, and prices based on the following guidelines:
- a. Location of medium-high density housing shall be encouraged primarily near the major activity center, as designated on the land use map and near the intersections of arterial/arterial and arterial/expressway designated streets.
 - b. Encourage the development of mixed use housing through the use of the density transfer provisions of the land use section of this plan.

- c. Allow secondary (Granny) housing units on qualifying parcels.

5-1.6 Comply with the policies and recommendations of the City's Housing Element.

PHYSICAL GROWTH AND CHANGE

The Woodward Park Community Plan concept is one of managed growth wherein major capital investments for new physical infrastructure are limited, and the capacities of existing service delivery systems, such as sewer and water, are maximized. Under this concept, new growth would only be allowed where it can be clearly demonstrated that public services are readily available. This concept would designate areas lacking such services as being appropriate for urban reserve.

Urbanization within the urban reserve area could not be considered prior to updating the General Plan, which is scheduled for completion in 1994. The General Plan update will determine future growth directions for the City and, based on a number of issues including those related to balanced urban growth and public service delivery system constraints, will examine the appropriateness of development within or beyond the urban reserve area.

With the completion of the General Plan update, growth into areas designated for urban reserve would be governed by a number of factors including: (1) ongoing monitoring of the City's sewer system; (2) the results of the City's pending north metropolitan area water study; and (3) compatibility with the policies and land use patterns of the Woodward Park Community Plan.

For plan amendments that represent an intensification of an approved urban land use, a finding must be made that sewer capacity is available over and above that reserved for planned development elsewhere in the Woodward Park community and that portion of the Bullard community served by the Herndon Trunk Sewer. In addition, a finding by the Public Works Department that sufficient potable water exists to serve the amendment proposal must accompany each amendment request.

Since sewer capacity has the most definable limitation (though water service is the most important), specific unit equivalents for the Herndon sewer service area should be established by the City's Public Works Department. The unit equivalents represent the maximum available unit development to be permitted in the Herndon sewer service area, and are to be based on the assumption that each person served will generate 105 gallons of sewage per day and each

unit contains 2.79 persons. Specific densities for residential use are cited in Policy 1-3.7 of this plan. Commercial flows will be calculated at 1,750 gallons per acre per day, with a peaking factor of 1.5 to be factored into each service area to achieve maximum allowable flows.

A copy of the sewer study is contained in the Appendix. Figure 6-1 shows the boundaries of each service area.

In order to guide and provide public input into the 1994 General Plan process, the Woodward Park Advisory Committee has developed a land use plan that projects and establishes the future character of urbanization out to the planning area's northern and eastern limits (see Appendix).

It is the Committee's intent, provided public resources are available and environmental factors permit, that this advisory plan be utilized to convey and perpetuate an overall character for the area should additional growth into areas designated for urban reserve be deemed appropriate.

Goal:

- 6-1. Manage fringe urban development and the provision of public facilities with increasing precision in order to implement the planned urban growth and form, assure that the needs of the community are met in a timely manner, and maximize service delivery efficiency.

Policies and Implementation Measures

- 6-1.1 Urban development shall be prohibited within all areas designated for urban reserve, pending the completion of the 1994 General Plan update.

FIGURE 6-1
Woodward Park Community Planning Area
Sewer Service Areas

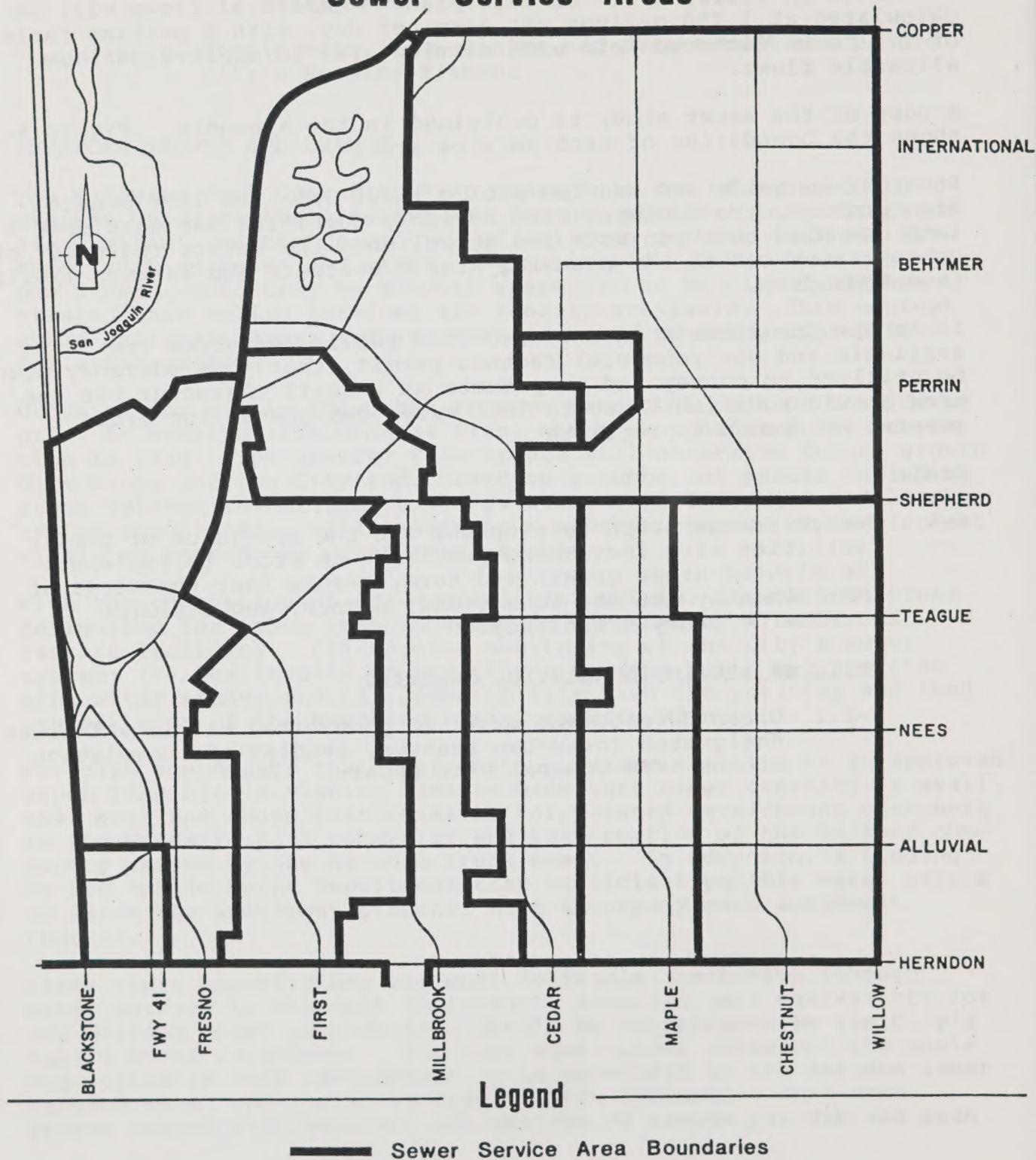
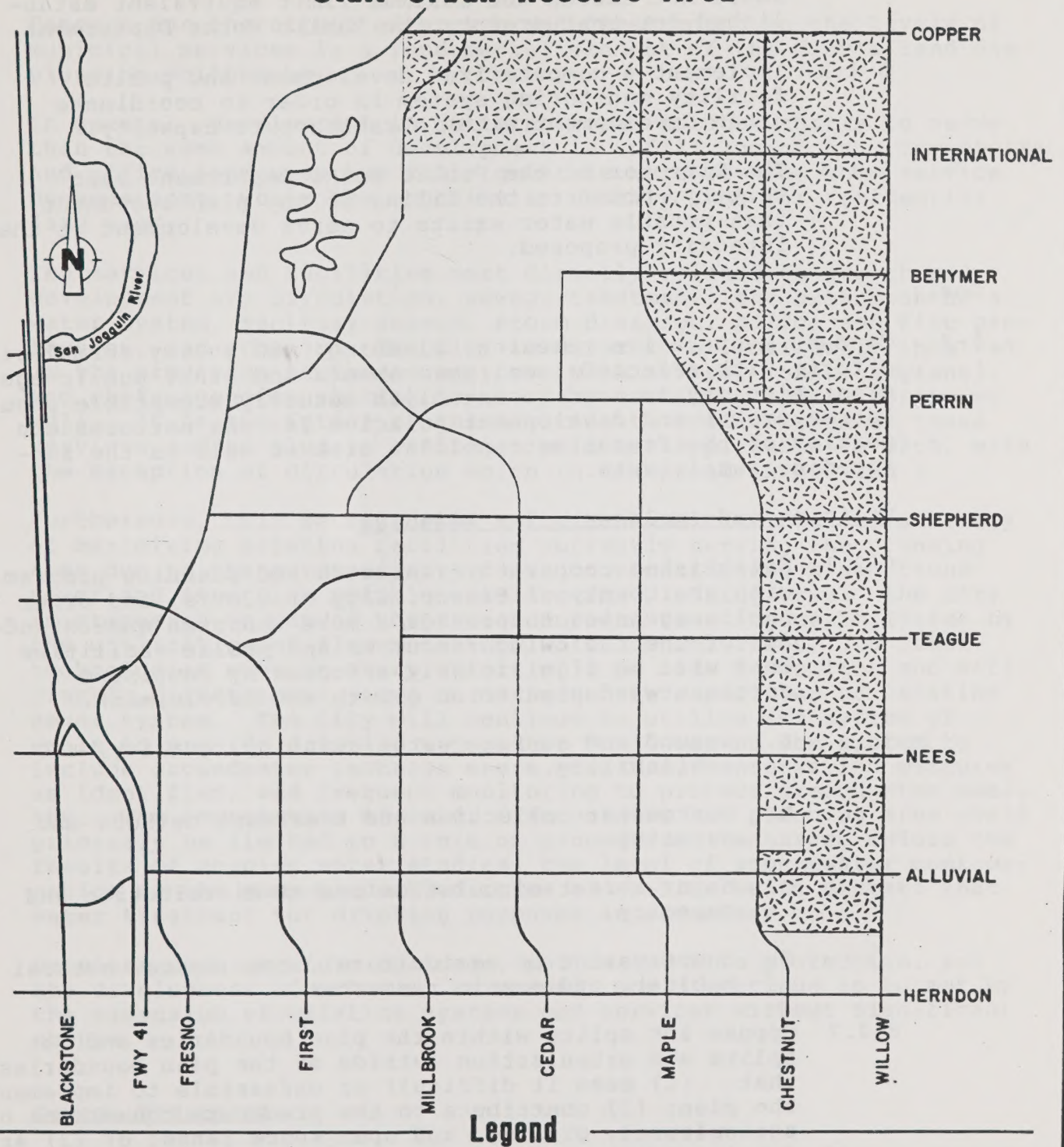


FIGURE 6-1.1 **Woodward Park Community Planning Area** **Staff Urban Reserve Area**



**Not Recommended by Citizen Advisory Committee.*

- 6-1.2 Development within the Herndon sewer service area shall not exceed the maximum limit equivalent established for that area by the Public Works Department.
- 6-1.3 Implement a computerized development and public facility monitoring system in order to coordinate urban development with infrastructure capacity.
- 6-1.4 The Director of the Public Works Department must certify, prior to the filing of any plan amendment, that potable water exists to serve development at the intensity proposed.

Goal:

- 6-2. Conduct cooperative research, planning, and policy formulation efforts with affected local governments and other public agencies which may be used to establish mutually acceptable population growth and development policies for the northeastern portion of the Fresno metropolitan area as well as the surrounding rural areas.

Policies and Implementation Measures

- 6-2.1 Establish a cooperative research and planning program with the County of Fresno, City of Clovis, and other public agencies to provide a more thorough understanding of the following resources and public facilities that will be significantly affected by continued northeastward population growth and development.
 - a. Ground and surface water quantity, quality, and availability.
 - b. Wastewater collection and treatment methods and capacity.
 - c. Major street circulation system distribution and capacity.
 - d. Conservation of agricultural, open space, natural habitat, and scenic resources.
- 6-2.2 Oppose lot splits within the plan boundaries and lot splits and urbanization outside of the plan boundaries that: (1) make it difficult or unfeasible to implement the plan; (2) contribute to the premature conversion of agricultural, grazing, and open space lands; or (3) are detrimental to the management of resources and facilities important to the metropolitan area such as air quality, water quantity and quality, traffic circulation, and riverbottom preservation.

PUBLIC FACILITIES

Concern for the effect of growth and development on the levels of municipal services is a fundamental element of the City's land use planning philosophy.

In general, development in outlying areas is more costly to serve than the same amount of development in infill locations. Commercial and office land uses typically generate more revenue than service demands cost, while the opposite is usually true for residential land uses.

The services and facilities most directly related to growth and development are circulation, sewage treatment, the extension of a water system, sanitary sewers, storm drainage, police and fire protection, and schools. The City is directly or indirectly involved in the provision of these services, with several local, regional, and state agencies sharing in the responsibility and authority as well. It is the intent of this section to examine each of these services and to clearly establish policies applicable to each, with the exception of circulation which is discussed in Section 3.

Furthermore, this section will reflect the City's overall strategy of maximizing existing facilities currently serving the planning area due to the extraordinary costs of constructing a new trunk sewer and importing potable water to the planning area. The City is proposing to expand the area's current sewerage capabilities by the utilization of flow metering, water conservation, and other technologies wherein every effort will be made to monitor and efficiently direct sewer flows to maximize the capacities of existing sewer system. The City will continue to utilize its system of wells to provide drinking water, but would expand the system to include groundwater recharge where possible, conservation measures as identified, and frequent monitoring to protect groundwater quality. The importation of water from outside the planning area would primarily be limited to a role of groundwater recharge, unless the results of ongoing water studies, the level of groundwater contamination or the pump production rates of on-line wells dictate that water treatment for drinking purposes is necessary.

Services such as storm drainage, police and fire protection, and the development of schools, as needed, would continue to be met by the expansion of existing systems and services without significant change.

Sewage Treatment

Sewage treatment will continue to be provided by the City's existing wastewater treatment plant. The development of new package wastewater treatment plants to serve new development in the planning area and vicinity would be opposed in view of its very great potential to pollute local groundwater aquifers.

Goal:

- 7-1. Provide sewage treatment for all new development within the Woodward Park area by the City's existing wastewater treatment plant.

Policies and Implementation Measures

- 7-1.1 Provide sewer facilities for all new development within the Woodward Park community in the Herndon Trunk Sewer line.
- 7-1.2 Oppose the development of new sewer treatment facilities either within the planning area or in groundwater recharge areas located to the north and east of the Woodward Park community.
- 7-1.3 Advocate any new sewer treatment facilities to be compatible with adjacent land use patterns and free from noxious odors.

Sanitary Sewers

Wastewater collection in the planning area is provided via the Herndon/Cornelia Trunk Sewer. This line also provides some sewer capacity to the Bullard community and to the City of Clovis. No new trunk sewer is proposed as part of this interim plan update. Instead, every effort will be made to maximize the sewage capacity of the existing line through such techniques as water conservation, peak flow reducing measures, and better management and exploitation of existing downstream facilities.

Goal:

- 7-2. Provide adequate sewer capacity for all urbanized and planned neighborhoods.

Policies and Implementation Measures

- 7-2.1 Undertake periodic review of overall wastewater collection systems and disposal needs of the Herndon Cornelia Trunk Sewer system with the results to be summarized and reported on semiannually by City staff to the City Council.
- 7-2.2 Monitor sewage flows on a semiannual basis and manage growth so that the cumulative sewage flows in the Herndon/Cornelia Trunk Sewer do not exceed that line's capacity.
- 7-2.3 Require that a finding be made by the Public Works Department that adequate sewer services can be pro-

vided to serve each proposed development prior to the approval of any development entitlement.

- 7-2.4 Require that approval of any entitlement located within the planning area be consistent with Policy 6-1.2 of the Physical Growth and Change section.
- 7-2.5 Prohibit the extension of any sewer main through areas not planned for urbanization.
- 7-2.6 Oppose the development of new septic tanks within the planning area's boundary.
- 7-2.7 Encourage water conservation programs, which result in reduced wastewater flows.
- 7-2.8 Explore all feasible alternatives, including flow monitoring, computerization, in-line storage, holding tanks, etc., necessary to increase or enhance the capacity of the Herndon/Cornelia Trunk Sewer.

Public Water Supply

Water resources within the Woodward Park community are limited and subject to contamination. It is the intent of this plan to provide for the maximization of these resources through water conservation, recharge, and the implementation of a stringent monitoring system. This plan does not envision the utilization of surface water resources for drinking purposes or the construction of any surface water treatment facilities.

However, it should be noted that should the results of ongoing water studies show a need (i.e., the level of groundwater contamination increases or the production rates of online wells decline), surface water treatment for drinking purposes may become necessary.

Goal:

- 7-3. Ensure the provision of adequate potable water to all developed and developing portions of the planned urban area.

Policies and Implementation Measures

- 7-3.1 Require that a finding be made that adequate services can be provided to serve any proposed development prior to approval of a development entitlement.
- 7-3.2 Encourage water conservation programs that will result in decreased water demand.
- 7-3.3 Protect areas of good groundwater recharge capability and expand programs that artificially recharge the underground water supply.
- 7-3.4 Develop a system of groundwater recharge basins at suitable locations along the planning area's east side and landscape that portion of each facility that is generally visible from any adjacent street frontage.
- 7-3.5 Coordinate with the Fresno Metropolitan Flood Control District and the City Water Division in determining the optimum location of water recharge basins for maximum water recharge capability.
- 7-3.6 Explore, if necessary, the use of air stripping, carbon filtration or other technologies for wells known to be experiencing contamination problems.
- 7-3.7 Require the proper construction and monitoring of facilities storing hazardous materials in order to prevent contamination of the groundwaters and underlying aquifers.

- 7-3.8 Utilize surface and groundwater resources in a manner that ensures the long-term supply of potable water. Efforts to conserve water supplies, both local and imported, shall be encouraged.
- 7-3.9 Initiate a City of Clovis/County of Fresno/City of Fresno joint water study aimed at developing a regional water management program that would maximize water resources and minimize the potential for groundwater contamination.
- 7-3.10 Implement regular monitoring of all wells in accordance with state regulations.

Storm Drainage

Storm drainage facilities within the Woodward Park area will continue to be provided by the Fresno Metropolitan Flood Control District (FMFCD). The FMFCD has developed or proposes to develop a total of six ponding basins in the area. Storm water flows to each basin will be accommodated by a system of surface drainage and storm drains, as planned by FMFCD. Fees and project requirements will be set by FMFCD.

Goal:

- 7-4. Ensure the provision of adequate storm drainage facilities to protect area residents from flooding caused by storm water runoff.

Policies and Mitigation Measures

- 7-4.1 Coordinate with the Fresno Metropolitan Flood Control District to determine the optimum location for siting ponding basins.
- 7-4.2 Prohibit runoff from commercial or industrial uses from draining directly into the San Joaquin River.
- 7-4.3 Utilize, where possible, all Fresno Metropolitan Flood Control facilities for groundwater recharge.
- 7-4.4 Develop each permanent ponding facility to maximize its potential for recreational use.

Fire

The City has achieved a "Class 2" fire insurance rating, unsurpassed by any other city in the state because of its excellent fire protec-

tion operations and water service system. This rating results in a low fire insurance rate for City residents.

In order to ensure the continuance and preservation of this rating, the City has established guidelines setting the permanent service area of fire stations at a two-mile "running" distance. Moreover, to reflect the effects of congestion on local streets, it is the City's intent to provide a five-minute average response time for structure fires.

Goal:

- 7-5. Provide a sufficient level of fire protection to maintain the City's Class 2 fire insurance rating.

Policies and Implementation Measures

- 7-5.1 Provide for an average five-minute response time for all emergency requests for service within the planning area.
- 7-5.2 Require that adequate water supplies and appliances are available for fire suppression in all areas of construction or new development.
- 7-5.3 Work with the various fire protection districts bordering the City to establish coordination in communications and fire suppression.
- 7-5.4 Review all development proposals with the Fire Department in order to ensure the inclusion of adequate on-site fire protection provisions.
- 7-5.5 Promote greater use of fire sprinkler systems for commercial uses.
- 7-5.6 Adopt and enforce building and fire codes that restrict the level of risk to life and property from fire commensurate with the fire suppression capabilities available to the City.
- 7-5.7 Site and maintain a well-trained, equipped fire suppression force commensurate with the level of response times necessary to protect life and property from fire in the planning area.
- 7-5.8 Prior to the approval of any development entitlement north of Behymer or east of the Cedar Avenue alignment prolonged, a specific site for Fire Station No. 21 shall be designated on adopted plan maps.

Police Protection

The Fresno Police Department currently provides a full range of police services to all incorporated areas within the Woodward Park community. Among the field services provided are the uniformed patrol response to calls for service, crime prevention, tactical crime enforcement, and traffic enforcement/accident prevention. The provision of these services is supplemented by the Operations Support Division, which investigates criminal cases, provides juvenile crime enforcement and prevention, and is actively involved in vice/narcotics control and enforcement.

In addition to these enforcement-related services, the Police Department also provides extensive crime prevention assistance to the community, including residence and business security inspections, neighborhood and business watch group formation, and public presentations. A police dressing station is located at Wrenwood Avenue and Fresno Street.

Goal:

- 7-6. Provide the highest level of police service to protect City residents and businesses.

Policies and Implementation Measures

- 7-6.1 Continue Police Department participation in the review of subdivision proposals and in assisting the Public Works Department with traffic matters.
- 7-6.2 Maintain communication with residents and businesses in order to learn about crime problems and to educate people on crime prevention measures and programs.

Schools

The City's role in school planning involves reserving school sites in developing areas and coordinating and cooperating with school districts in helping to provide school facilities. The City also coordinates the joint use of park facilities located immediately adjacent to existing and planned school sites.

The process of reserving school sites within the City usually takes place with approval of new community plans and during subdivision review of individual development projects.

The City Planning Division and school districts coordinate efforts in developing locational criteria for school sites in newly developing areas. Presently, the Clovis Unified School District is using the following criteria:

<u>Grade</u>	<u>Attendance Radius</u>	<u>Minimum Site Size</u>
K - 6	1 mile	15 acres
7 - 8	2 miles	40 acres
9 -12	3 miles	60 acres

The City also requires schools to be located in areas that are safely and conveniently accessible, and free from heavy traffic, excessive noise, and incompatible land uses.

Goal:

- 7-7. To provide a consistently high level of education opportunities to the community.

Policies and Implementation Measures

- 7-7.1 Involve the Clovis Unified School District in the early stages of the land use planning process.
- 7-7.2 Continue to assist in reserving school sites based on the locational criteria as follows:
- a. Locate elementary schools on sites that are safely and conveniently accessible, and free from heavy traffic, excessive noise, and incompatible land uses.
 - b. Locate schools, beyond the elementary level, adjacent to major streets.
 - c. Locate all school sites centrally with respect to their planned attendance areas.
 - d. Locate school sites, where possible, away from multiple-family or commercial developments.
- 7-7.3 Designate school sites on the land use element of this plan to accommodate school district needs.
- 7-7.4 Pursuant to the Clovis Unified School District (CUSD) report, North of Shepherd Avenue Elementary School Site Study (June 27, 1989), upon determination of an exact location for each site, the CUSD shall process a plan amendment. (A copy of the study is located in the Final EIR.)
- 7-7.5 Explore ways to utilize existing school facilities for nonschool-related and child care activities.

Solid Waste Disposal

The solid waste goals and policies address both the land use implications of present day technologies and practices with respect to disposal in sanitary landfill sites as well as the recognition that alternative methods and technologies should be pursued.

Goal:

- 7-8. Provide adequate solid waste disposal facilities and services for the collection, storage, and reuse of refuse.

Policies and Implementation Measures

- 7-8.1 Continue the City's neighborhood cleanup program and develop and implement additional programs when necessary.
- 7-8.2 Explore programs and new techniques of solid waste disposal to reduce the need for additional landfill sites.
- 7-8.3 Encourage recycling and composting efforts to the maximum extent feasible in order to reduce the volume and toxicity of solid wastes that must be sent to landfill facilities.
- 7-8.4 Prohibit private and public waste disposal facilities and transfer stations.

ENVIRONMENTAL CONCERNS

The urbanization proposed by the Woodward Park Community Plan may result in the generation of significant impacts on the local environment. Because of the area's location on the City's urban fringe, and given its basic geological setting, development may adversely impact the planning area's groundwater system and overall air quality, result in increased noise levels, and contribute to encroachment onto designated flood plains.

The Woodward Park community is located near the Sierra foothills on a broad alluvial plain, characterized by shallow aquifers with lower than normal water-carrying capacities that are susceptible to groundwater contamination. The planning area is bordered along its northern boundary by the San Joaquin River flood plain, and is located approximately seven miles downstream from Friant Dam and Millerton Lake. Because of its location on the urban fringe, vehicle trips tend to be longer resulting in higher than normal fuel consumption and air pollution.

The area's main road system also serves to facilitate regional circulation needs which results in significant traffic congestion and, therefore, further increases in air pollution.

Finally, as a direct result of the area's significant growth and regional road system, area noise levels have continued to climb over the last several years. In order to address these environmental concerns, it is the intent of this section to establish specific goals and policies to provide for the protection of the area's groundwater and air quality to mitigate against further noise increases, unnecessary energy consumption, and to prevent unnecessary encroachment onto designated flood plains.

Water Quantity and Quality

The Woodward Park community derives all of its domestic water through groundwater pumping. The planning area has tapped existing groundwater resources to the maximum extent possible to make available a good supply of high-quality water. However, groundwater availability may not meet all future needs and must be carefully managed to prevent overpumping and/or contamination.

Historically, groundwater for the Woodward Park area is recharged by four means: (1) groundwater percolation originating from rainfall and stream runoff in the areas located north and east of the planning area; (2) percolation from agricultural irrigation occurring both in Woodward Park and areas to the east; (3) percolation from the San Joaquin River; and (4) percolation from local canals, creeks, and intermittent streams passing through the study area.

This recharged water flows under the Woodward Park area through a series of interconnected shallow aquifers comprised of a mixture of boulders, cobbles, gravels, sands, and clays. Where clays are present in large quantities, groundwater production declines. The Woodward Park area is characterized by such a large clay concentration in the form of a clay ridge, running underground from Copper and Willow Avenues to Herndon and Blackstone Avenues. This portion of the planning area has experienced reduced groundwater production levels. Paralleling Friant Road is an area of cobbles, possibly an older bed of the San Joaquin River, that has yielded good production levels at high quality. The City has moved to take advantage of these latter aquifers while continuing to seek high production facilities near the noted clay ridge.

If managed wisely, available groundwater should be sufficient to accommodate planned development in the area. Unfortunately, other communities, including the City of Clovis, the County of Fresno, and Madera County, draw upon the same aquifers and compete for the same areas of groundwater recharge.

Furthermore, due to cementation in the San Joaquin River channel and groundwater contamination by dibromochloropropane (DBCP) and nitrates, some local aquifers may be contaminated and irreplaceable wells lost.

The City is, therefore, moving to initiate a program of metropolitan-wide groundwater management, monitoring, and cooperation.

Goal:

- 8-1. Conserve and augment the water resources of the planning area to ensure that adequate groundwater resources remain available to accommodate planned development.

Policies and Implementation Measures

- 8-1.1 Develop and maintain facilities for groundwater recharge in the planning area.
- 8-1.2 Utilize all available surface water entitlements for recharge purposes.
- 8-1.3 Work toward resolving the problem of groundwater resource deficiencies in the eastern portions of the planning area.
- 8-1.4 Protect planning area groundwater resources from further quality degradation.
- 8-1.5 Provide substitute or supplemental water resources to areas already impacted by groundwater quality degradation.
- 8-1.6 Achieve a continuing balance between competing demands for water resource usage.
- 8-1.7 Consider each proposal for water resource usage within the context of total planning area needs and priorities (i.e., the need to transport water, groundwater recharge, flood control, recreational needs, and riparian habitat preservation).
- 8-1.8 Maintain effective cooperative planning programs for water resource conservation and utilization in the planning area.
- 8-1.9 Prohibit urban development in areas not served by a sanitary sewer system.

Air Quality

The Woodward Park area is located along the east side of the San Joaquin Valley, a great valley boxed in on three sides by mountain ranges rising from 4,500 to 14,000 feet in height. This "basin" situation, when coupled with the valley's climate, temperature inversions, and lack of air movement, contributes to serious air quality problems. Because of these characteristics and the use of the automobile as the prime mode of transportation, Fresno County was not expected to comply with the national ambient air quality standards for ozone, carbon monoxide, and particulates by the mandated deadline of 1985. Fresno County has, therefore, been designated a non-attainment area for photochemical oxidants (ozone), particulate matter, and carbon monoxide (CO).

In response to this situation, the Fresno County Air Pollution Control District (APCD) prepared an Air Quality Maintenance Plan (AQMP) and Nonattainment Area Plan (NAP) in 1979. The AQMP/NAP was updated in 1982, and is referred to as the Fresno Clean Air Plan. The 1985 deadline was subsequently extended by the Environmental Protection Agency (EPA) to December 31, 1987.

Based upon the air quality monitoring required by the APCD, it has been determined that Fresno County will not achieve compliance with the national ambient air quality standards for ozone, carbon monoxide, and particulates as required. On June 29, 1987, the EPA announced a sanction on 14 regions. Six of these are in California, of which Fresno County is one. This action prohibits the construction of new uses that would have the potential of emitting 100 or more tons annually of volatile organic compounds (key elements in the formation of ozone) or carbon monoxide. Although it is unlikely that this sanction on large stationary sources, such as industrial plants, will adversely affect the Fresno metropolitan area, further sanctions are possible. These sanctions might include the discontinuance of federal funds for highway and sewer improvements.

Within the Woodward Park area, because of the importance of the automobile as a convenient method of travel, the relatively low density of residential areas, the long length of each vehicle trip made by area residents, and high level of congestion on roads in north Fresno, air quality will continue to decline. Development in the Woodward Park area will continue to have significant cumulative impacts on the metropolitan area's air quality. The City has adopted a revised General Plan Air Quality Element that reaffirms the City of Fresno's commitment to participate in the continuing effort to improve air quality. Therefore, it is the intent of this plan to concentrate the more intensive land uses along the Freeway 41 corridor and Herndon Avenue to support the City's General Plan Air Quality Element.

Goal:

- 8-2. Attain and maintain state and federal air quality standards in cooperation with other agencies.

Policies and Implementation Measures

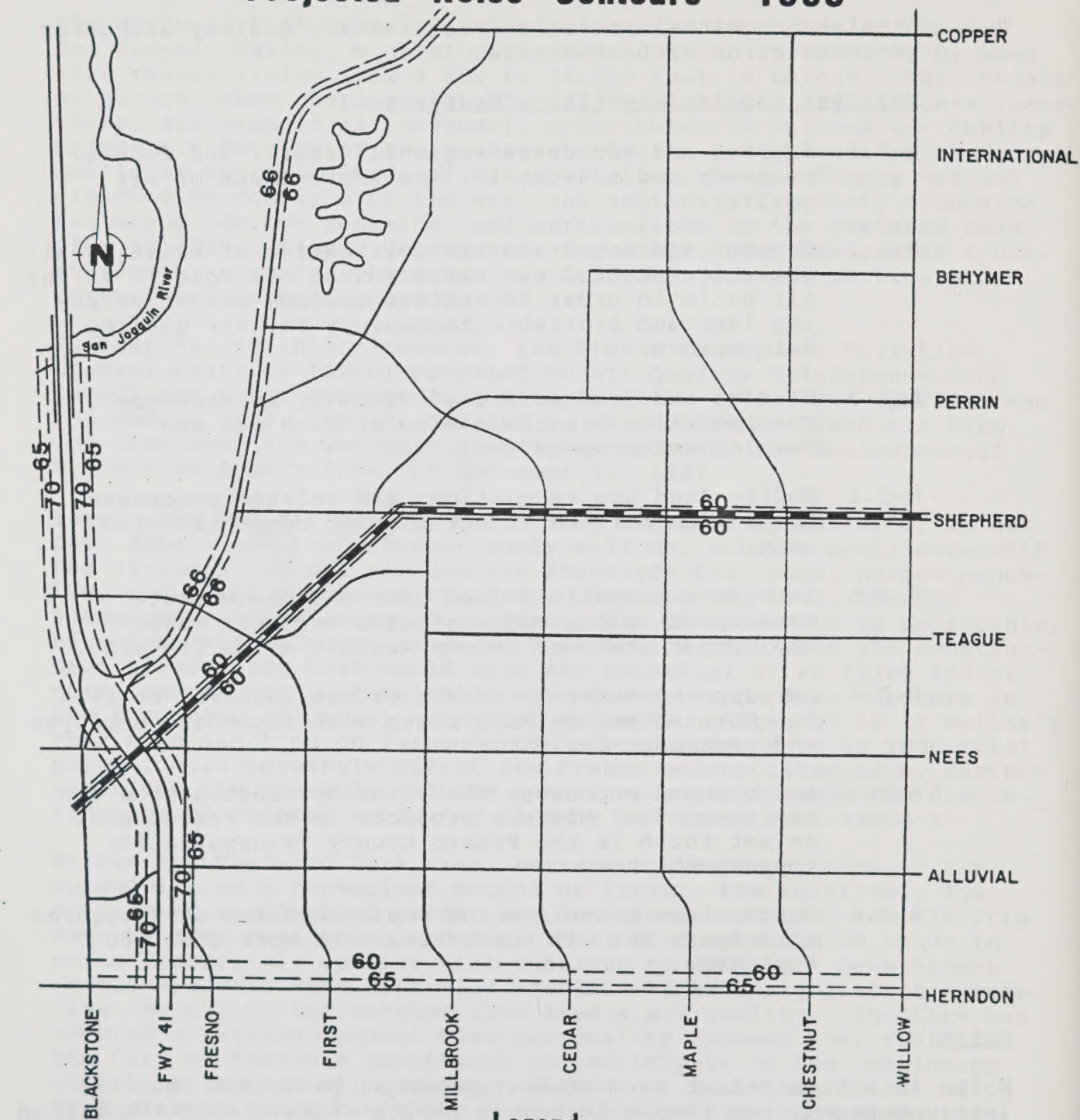
- 8-2.1 Support and encourage regional, state, and federal programs and actions for the improvement of air quality.
- 8-2.2 Support and encourage the unification of existing air pollution control districts in the San Joaquin Valley Air Basin in order to achieve maximum use of existing laws and available technology for air quality maintenance.
- 8-2.3 Develop and incorporate air quality maintenance considerations in the review of land use and development proposals.
- 8-2.4 Modify land use regulations and related processes to provide for the integration of compatible land uses.
- 8-2.5 Integrate compatible land uses and concentrate development along major streets and near major employment areas to reduce vehicle miles traveled.
- 8-2.6 Develop the means to obtain or use land for on-site bus turning and parking areas with attendant employee and passenger facilities.
- 8-2.7 Support and encourage the priority construction and improvement of highway projects in the Fresno area as set forth in the Fresno County Transportation Improvement Act.
- 8-2.8 Support and encourage the implementation of staggered work hours for all businesses with more than 100 employees.

Noise

Noise is a significant form of environmental pollution that, if left unmanaged, can result in severe health risks. Most identified noise sources in the urban area are man-made.

Noise is defined in the context of this analysis as unwanted sound;

FIGURE 8-3 **Woodward Park Community Planning Area** **Projected Noise Contours - 1995**



Legend

-- 60 -- Community Noise Equivalent Levels

*Sources : Noise Study Report, CALTRANS, 1983
Brown - Buntin Associates Study, 1982*

a subjective reaction to a physical phenomenon. Its effects on people can range from pleasure to annoyance, and include an inhibition of a sense of well-being, sleep disturbance, interference with speech and activities, and even physical damage resulting in hearing impairment.

There are two composite noise descriptors in common use today, the Ldn and CNEL. The Ldn is an average day and night sound level based upon an average hourly sound level over a 24-hour day, with a +10 dB weighting applied to nighttime (2200 hours - 0700 hours) sound level. Community Noise Equivalent Level (CNEL) is also based on an average hourly sound level over a 24-hour day, with an additional +5 dB penalty applied to evening (1900 hours - 2200 hours) hourly sound levels. The CNEL scale was developed for the California Airport Noise Regulations. For planning purposes, the CNEL and Ldn descriptions are similar enough to be interchangeable.

Different land uses have varying degrees of sensitivity to noise, and the time and type of noise can alter the impact of noise on land uses. The most sensitive land uses include residential dwellings, schools, hospitals, and churches. Moderately sensitive land uses include motels, commercial, and office uses. Agriculture, parking facilities, warehouses, and industrial uses are considered to be land uses that are largely insensitive to noise.

The major noise sources in the Woodward Park community are roadways such as Freeway 41, Herndon Avenue, and Friant Road (south of Audubon Drive), and commercial and industrial development such as shopping centers, and sand and gravel extraction. As growth and development occurs in the Woodward Park area, noise levels will continue to increase. The noise contours analysis in the General Plan Noise Element takes this into account and makes predictions for roadway and rail contours based upon a year 2000 prediction.

Goal:

- 8-3. Minimize the impact of noise on people through the implementation of noise reduction and suppression techniques, and appropriate land use policies.

Policies and Implementation Measures

- 8-3.1 Designate areas of the community exposed to existing or projected exterior noise levels exceeding Ldn/CNEL 60 dB as noise-impacted areas.
- 8-3.2 Prohibit new development of residential or other noise-sensitive uses in noise-impacted areas unless effective mitigation measures are incorporated into

the project design to reduce noise levels in outdoor activity areas to Ldn 60 dB or less and interior noise levels to Ldn 45 dB or less in noise-sensitive rooms.

- 8-3.3 Incorporate effective mitigation measures to minimize adverse noise impacts on surrounding noise-sensitive land uses through design techniques such as:
- a. Use of Barriers. Barriers such as walls, berms or other buildings can reduce noise exposure when placed between the noise source and the receiver.
 - b. Site Design. Buildings can be placed on a project site to shield other structures or areas, to remove them from noise-impacted areas, and to prevent an increase in noise level caused by reflections.
 - c. Unit Design. An acceptable interior noise environment can be achieved by placing the noise-sensitive portions of a dwelling on the side of the unit farthest from the noise source.
 - d. Building Design. The shape of building facades, as well as the orientation of the building, can influence reflected noise levels affecting adjacent buildings.
 - e. Noise Reduction by Building Facades. When interior noise levels are of concern in a noisy environment, noise reduction may be obtained through acoustical design of building facades.
 - f. Use of Vegetation. Although vegetation is not a practical method of noise control unless large tracts of dense foliage are part of the existing landscape, it can be used to acoustically "soften" the intervening ground between a noise source and receiver, increasing ground absorption of sound and thus increasing the attenuation of sound with distance.
 - g. Sound Absorbing Materials. Absorptive materials, such as fiberglass, foam, cloth, and acoustical tiles or panels are used to reduce reflection or reverberation in closed spaces. Because such materials are easily damaged by sunlight and moisture, their application as an outdoor noise control tool is limited to special cases where the control of reflected noise is critical.

- 8-3.4 Include noise attenuation techniques in the design of all new arterial streets.
- 8-3.5 Discourage the use of outdoor appliances, air conditioners, and other consumer products that generate noise levels in excess of the City's exterior noise level standards.
- 8-3.6 Allow commercial drive-through uses only when consistency with the City's exterior noise level standards and compatibility with adjacent land uses can be demonstrated.

Flooding

Flooding represents a potential hazard to the population and buildings of a community and, as such, is a concern that must be incorporated into land use planning. The potential for flooding within the planning area originates from the San Joaquin River, which is located along the planning area's northern boundary.

The San Joaquin River basin is the second largest river in California, with a total length of about 350 miles.

The natural watershed of the San Joaquin River study area encompasses 1,638 square miles, varies in elevation from 350 feet to 13,000 feet, and experiences a diverse pattern of rainfall. The average annual rainfall for the Woodward Park area is slightly greater than ten inches. Rainfall is 20.52 inches immediately above Millerton Lake, and over 60 inches at the crest of the watershed. Annual runoff volumes range from 37,600 acre feet to 4,367,800 acre feet, averaging 1,790,300 acre feet. Heavy flow periods are normally divided into two seasons: (1) flows from rainstorms predominate from November through March; and (2) snow melt flows dominate from April through July.

Flooding on a river system like the San Joaquin can be caused by, or aggravated by, five factors. Those factors are climatic events (a major rainstorm or snow melt), dam failure, lack of river channel maintenance, reservoirs sedimentation, and local/urban runoff.

In 1939, the natural drainage pattern dramatically changed with the initiation of construction of the Friant Dam. This facility was designed for irrigation purposes, and was partially completed in 1942 and made fully operational in 1949.

It is operated in coordination with approximately 21 upstream reservoirs, forebays and pumping facilities, and can control an estimated 50-year rain flood or a 25-year snow melt flood. Flows of these magnitudes require daily average releases at Friant Dam of 8,000 cubic feet per second (c.f.s.), with recent peak release

reaching 14,300 c.f.s. The reservoir was designed with a net storage capacity of 520,500 acre feet. Of this total, 170,000 acre feet is reserved for rainfall runoff, with the snow melt runoff being variable depending on the year's snow melt projections. The maximum peak inflow to Millerton Lake was estimated at about 97,000 c.f.s. on December 23, 1985. The reservoir is designed to accommodate a maximum of 385,000 acre feet during snow melt.

It should be noted that the dam was designed as an irrigation facility and not as a flood control structure. The flood operation criteria was developed by the Corps of Engineers after the project was completed.

In 1951, the river channel was rated to have a safe capacity of 8,000 c.f.s. for flood releases. Now the channel has difficulty in various locations of passing a flow of 3,000 to 3,500 c.f.s. The higher releases cause destruction and erosion of lands, crops, etc. The eroded material is transported downstream and is deposited in the lower river areas, creating problems that include additional flooding, levee breaks, and seepage. This situation has been developing over the years and is mainly attributed to the intrusion of shrubs, trees, bamboo, etc., into the river channel which is restricting water flow and raising the level of the river for a given flow. This was demonstrated during an observed and measured period from 1953 to 1967 when the water surface elevation in the river, at a flow of 8,000 c.f.s., increased two and one-half feet. Additional points which may be indications of this problem are as follows:

1. The designated floodway maps adopted by the Department of Water Resources in June, 1976 show the Wildwood area, east of Highway 41 in Madera County, as being above the floodway line at a maximum river flow of 20,000 c.f.s. When releases reached 14,300± c.f.s. (peak) on February 19, 1986, the Wildwood Mobile Home Park was nearly flooded.
2. During the dates of February 18, 19, and 20, 1986, maximum releases (mean daily) from the dam were 13,028, 14,117 and 12,325 c.f.s., respectively. On those same dates, the recorded flows at Gravelly Ford (located downstream, seven miles west of State Highway 145) were 9,284, 12,900 and 14,400 c.f.s., respectively. A day later, on February 21, when dam releases were reduced to 7,712 c.f.s., and two days after the maximum release of 14,117 c.f.s. on February 19, the recorded flow at Gravelly Ford was still at 13,500 c.f.s. This is an indication of flow restrictions in the channel between the release point (Friant Dam) and the Gravelly Ford gauging station. In addition, an unofficial record mark placed by a property owner (E. L. Oslund) upstream from the Gravelly Ford station and about

two miles west of Highway 145, places the river water level during these recent 14,000+ c.f.s. (peak flow) flows within two and one-half to three feet of the level of the maximum recorded river flow of approximately 77,200 c.f.s. in December, 1937 prior to the construction of Friant Dam.

Given this information, and the lack of any ongoing channel maintenance program, it is apparent that development in the river-bottom will be exposed to an existing flood risk.

This potential is real. Climatic events, though unpredictable, remain a constant threat in the riverbottom. The possibility of dam failure, while unlikely, cannot be ignored. The lack of a channel maintenance program will be a significant source of potential flooding until a comprehensive maintenance program is established for the area.

Goal:

- 8-4. Protect future residents of the Woodward Park community from flood-related hazards.

Policies and Implementation Measures

- 8-4.1 Prohibit the development of new residential uses in the San Joaquin Riverbottom.
- 8-4.2 Design new development to provide protection from potential impacts of flooding during the "one percent" or "100-year" flood.

Energy

Although Woodward Park area residents are affected by all energy usage, they have little direct control over decisions affecting its distribution. However, the City can influence the amount and type of energy sources its residents consume. The City's General Plan includes policies to impact energy consumption through the mix of land uses and the design of a transportation system which provides the most efficient movement of people and goods.

Fresno can also affect energy supplies and consumption by reducing the energy consumed for City operations, by using renewable energy sources where feasible, and by supporting the development of appropriate renewable energy sources.

Goal:

- 8-5. Foster development that, by its location and design, reduces the need for nonrenewable energy resources.

Policies and Implementation Measures

- 8-5.1 Promote development in areas served by public transit and other existing services. Higher residential densities should be encouraged to locate in areas served by primary public transit routes and close to the major employment centers.
- 8-5.2 Public facilities should be encouraged to locate in areas easily served by public transportation.
- 8-5.3 The energy efficiency of new development should be considered when land use and development review decisions are made. The City's design techniques include provisions for solar access, for siting structures to maximize natural heating and cooling, landscaping to aid passive cooling, protection from prevailing winds, and maximum year-round solar access.
- 8-5.4 Encourage owners and residents of existing developments to implement programs to use energy more efficiently and to explore alternative energy source.

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PREFACE

This portion of the Woodward Park Community Plan Update document constitutes the Final Environmental Impact Report (EIR) required by the California Environmental Quality Act (CEQA) and its implementing guidelines. In accordance with Sections 15089(a) and 15132 of the CEQA Guidelines and the City of Fresno's Environmental Quality Ordinance, the Final EIR consists of the following:

1. Director's Summary, Conclusions and Recommendations.
2. List of persons, organizations and public agencies commenting on the Draft EIR and the content of those comments.
3. The City of Fresno's responses to significant environmental points identified through the review and consultation process.
4. The Draft EIR, as revised in response to comments and significant environmental points.

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This section describes the proposed project, its potentially significant environmental effects, corresponding mitigation measures, and recommendations concerning appropriate findings required by CEQA Guidelines.

PROJECT DESCRIPTION

The project, as evaluated in EIR No. 10100, is the Woodward Park Community Plan Update. This plan update consists of written goals and policies with accompanying maps or diagrams which refine and implement the 1984 Fresno General Plan as it applies to the Woodward Park Community. This community plan area is located on the developing northeastern fringe of the Fresno Metropolitan Area and covers approximately 8,290 acres bounded by the San Joaquin River, Copper Avenue, Willow Avenue, Herndon Avenue, and Blackstone Avenue/Freeway 41.

The primary objective of the community plan is to establish the goals and policies/implementation measures necessary for the City of Fresno to guide anticipated urban development over the next five years and judiciously manage public facilities and resources. The plan's concept, purpose and the significant issues it addresses are described in detail by the introductions to the plan and the EIR. These descriptions identify the plan's intention to address major community issues and to balance anticipated development with the capacities of public facilities and available resources. In addition, the plan identifies its intention to guide urban development in a manner compatible with the community's natural and man-made characteristics.

The Woodward Park Community Plan Area has experienced considerable urban development over the past decade as well as substantial increases in its planned urban area and intensity. The Joint Resolution on Metropolitan Planning, adopted by the Cities of Fresno and Clovis and the County of Fresno, provides the potential for substantial additional urban expansion, as implemented through the 1984 Fresno General Plan and the Woodward Park Community Plan Update. Two alternative land use plans are presented by the plan update to guide this potential urban growth. One alternative is recommended by City of Fresno staff. It accommodates current growth trends and provides for an urban reserve area with accompanying policies to more effectively manage the process of urban expansion. A second alternative is recommended by the Woodward Park Community Plan Advisory Committee, which does not utilize an urban reserve designation. This concept relies upon the potential economic incentives of reduced development costs to encourage contiguous urban development.

CONCLUSIONS

Development Department-Recommended Plan - This plan would allow moderate urban development over the next five years compatible with current development trends and community conditions. The identified mitigation measures are generally adequate to reduce significant potential environmental impacts to an acceptable level. However, the generation of air pollutants, traffic congestion, noise, and the conversion of agricultural land caused by urban development cannot be fully alleviated. These impacts result from the conversion of open agricultural land to roads, urban structures and ornamental landscapes. The accompanying urban activities, vehicle travel and use of hydrocarbon fuels can be reduced, but not avoided, given current technology and standards of living.

Additional environmental issues of concern within the Woodward Park Community include groundwater resources, sewer capacity, public safety services, school facilities, overintensification of development and land use conflicts. These issues can be addressed through the diligent implementation of the proposed policies and implementation measures to manage urban growth, provide public facilities and services and allocate finite natural resources. However, unforeseen events or changing conditions could result in water deficiencies, reduced levels of service or inadequate capacities.

Committee-Recommended Plan - This plan, as recommended by the Citizens Advisory Committee for the Woodward Park Community Plan Update, could allow immediate urban development to extend out to the plan boundaries of Copper and Willow Avenues. This plan does not utilize the urban reserve designation and accompanying policies to manage the extent and timing of urban development over the next five years. As a result, more expansive and less contiguous urban development could occur. This development pattern could exacerbate public facility environmental impacts and environmental impacts associated with resource management.

Opportunities to manage groundwater resources may be inhibited by the premature development of fringe areas. Mitigative measures to identify and implement wellhead water contamination treatment facilities and expand groundwater recharge basins may not be resolved prior to development commitments. Prime recharge facilities and water transportation systems may not be adequately accommodated.

Requested Modifications - These requests generally propose more intensive urban uses than that proposed by the Development Department or Committee-recommended plans. These modifications are described in the EIR "Introduction" and "Impacts of Plan Modifications" subsections. These modifications generally increase vehicle traffic and associated air pollution, congestion and noise. Increased demands on water and sewer systems will also generally

occur. The growth-inducing tendencies of these uses in combination with the Committee-recommended plan could accelerate urban development. Mitigation measures to reduce incremental impacts upon agricultural uses, excessive demands upon urban facilities and efficient management of resources may become less effective or infeasible to implement.

SUMMARY OF SIGNIFICANT IMPACTS AND MITIGATION MEASURES

Inherent in continued urban development are various potentially significant environmental effects. These effects and corresponding mitigation measures are discussed in detail by the Woodward Park Community Plan Update and EIR No. 10100. In addition, these environmental issues were examined by the 1984 Fresno General Plan and EIR No. 10085. In most cases, the potentially significant environmental effects will be substantially mitigated by existing development standards and programs or policies/implementation measures identified by the community plan update. However, there are certain effects caused by urban development and subsequent urban activities that are unavoidable, although they may be partially mitigable.

Environmental Impact Report No. 10085 for the 1984 Fresno General Plan identified the following eight significant environmental effects: a) vehicle-emitted air pollutants; b) potential hazards due to groundwater contamination; c) depletion of groundwater resources; d) conversion of agricultural Class I and II soils to urban uses; e) consumption of nonrenewable energy resources; f) consumption of nonrenewable materials for construction; g) increases in traffic-generated noise; and, h) agricultural and urban land use conflicts.

The Woodward Park Community Plan Update has been prepared to provide more explicit guidelines and strategies for urban development in a manner responsive to these previously identified environmental impacts and mitigation measures. In addition, the community plan and related EIR address resource constraints and community issues such as limited sewer trunk capacity, vehicular circulation and capacity constraints, excessively intensive land use designations, public safety services, school facilities, land use conflicts and growth-inducing implications.

Section 15091 of the CEQA Guidelines requires that no public agency shall approve or carry out a project for which an environmental impact report has been completed unless one or more of the following written findings are identified for each of the significant effects, accompanied by a statement of facts supporting each finding:

1. Changes or alterations have been required in, or incorporated into, the project which mitigates or avoids the significant environmental effects thereof as identified in the Final EIR.

2. Such changes or alterations are within the responsibility and jurisdiction of another public agency.
3. Specific economic, social or other considerations make infeasible the mitigation measures identified in the Final EIR.

The significant environmental impacts associated with the proposed plan update and applicable mitigation measures to reduce the severity of these impacts are summarized below. The parenthetical notations after each mitigation measure indicate its applicability to the plan alternatives and requested modifications.

Water

Significant Impacts

- o Groundwater overdraft.
- o Groundwater contamination.
- o Reduced level of service.

Mitigation Measures (may not be totally mitigated)

- o Prepare annual water budget and water system capital improvements budget (DDRP)(a), (CRP), (DDRP/WM)(a) and (CRP/WM)(a).
- o Dedication of adequate water well site for wellhead treatment facilities (DDRP)(a), (CRP)(a), (DDRP/WM)(a) and (CRP/WM)(a).
- o Water well fee for DBCP contamination wellhead treatment (DDRP)(a), (CRP)(a), (DDRP/WM)(a) and (CRP/WM)(a).
- o Accelerated UGM water well fees (DDRP)(a), (CRP)(a), (DDRP/WM)(a) and (CRP/WM)(a).

* Plan alternatives are identified as: (DDRP) Development Department Recommended Plan; (CRP) Committee Recommended Plan; (DDRP/WM) Development Department Recommended Plan/with Requested Modifications; (CRP/WM) Committee Recommended Plan/with Requested Modifications. Applicability to the plan alternative is identified as: (a) incorporated into the plan; (b) within the jurisdiction of another agency; and, (c) infeasible to implement.

- o Implement policies 7-3.1 through 7-3.10 and 8-1.1 through 8-1.9 of the plan update, as recommended by the Development Department.

- 7-3.1 Requires finding of availability of adequate water (DDRP)(a), (CRP)(a), (DDRP/WM)(a) and (CRP/WM)(a).
- 7-3.2 Encourages water conservation (DDRP)(a), (CRP)(a), (DDRP/WM)(a) and (CRP/WM)(a).
- 7-3.3 Protects areas of good groundwater recharge capability (DDRP)(a)(b), (CRP)(c), (DDRP/WM)(a)(b) and (CRP/WM)(c).
- 7-3.4 Develop system of recharge basins along east side (DDRP)(a)(b), (CRP)(c), (DDRP/WM)(a)(b) and (CRP/WM)(c).
- 7-3.5 Coordinate with Fresno Metropolitan Flood Control District to locate recharge basins (DDRP)(a)(b), (CRP)(a)(b), (DDRP/WM)(a)(b) and (CRP/WM)(a)(b).
- 7-3.6 Explore air-stripping, carbon filtration and other wellhead treatment (DDRP)(a), (CRP)(a) and (DDRP/WM).
- 7-3.7 Proper construction and monitoring of hazardous materials storage facilities (DDRP)(a), (CRP)(a), (DDRP/WM)(a) and (CRP/WM)(a).
- 7-3.8 Manage surface and groundwater resources to assure long-term supply (DDRP)(a)(b), (CRP)(a)(b), (DDRP/WM)(a)(b) and (CRP/WM)(a)(b).
- 7-3.9 Initiate City of Clovis/County of Fresno/ City of Fresno joint water study (DDRP)(a), (CRP)(a), (DDRP/WM)(a) and (CRP/WM)(a).

* Plan alternatives identified as: (DDRP) Development Department Recommended Plan; (CRP) Committee Recommended Plan; (DDRP/WM) Development Department Recommended Plan/with Requested Modifications; (CRP/WM) Committee Recommended Plan/with Requested Modifications. Applicability to the plan alternative is identified as: (a) incorporated into the plan; (b) within the jurisdiction of another agency; and, (c) infeasible to implement.

- 7-3.10 Regular monitoring of wells (DDRP)(a), (CRP)(a), (DDRP/WM)(a) and (CRP/WM)(a).
- 8-1.1, 8-1.3 and 8-1.8 are similar to policies and mitigation measures identified above.
- 8-1.2 Utilize all available surface water entitlements for recharge purposes (DDRP)(a), (CRP)(a), (DDRP/WM)(a) and (CRP/WM)(a).
- 8-1.5 Provide substitute or supplemental water resources to areas already impacted by ground-water quality degradation (DDRP)(a), (CRP)(a), (DDRP/WM)(a) and (CRP/WM)(a).
- 8-1.7 Consider each proposal for water resource usage within the context of total planning area needs and priorities (DDRP)(a)(b), (CRP)(a)(b), (DDRP/WM)(a)(b) and (CRP/WM)(a)(b).
- 8-1.9 Prohibit urban development in areas not served by a sanitary sewer system (DDRP)(a)(b), (CRP)(a)(b), (DDRP/WM)(a)(b) and (CRP/WM)(a)(b).

Traffic

Significant Impacts

- o Congestion/reduced service levels.
- o Increased traffic and related noise, air pollution, glare and related contaminants.

Mitigation Measures (may not be totally mitigated)

- o Implement plan concept and policies/implementation measures to reduce vehicle travel and congestion (DDRP)(c), (CRP)(c), (DDRP/WM)(c) and (CRP/WM)(c).
- o Implement policies/implementation measures and standards of plan update, general plan and ordinances to minimize noise, glare and storm water contaminants (DDRP)(a)(b), (CRP)(a)(b), (DDRP/WM)(a)(b) and (CRP/WM)(a)(b).

- * Plan alternatives identified as: (DDRP) Development Department Recommended Plan; (CRP) Committee Recommended Plan; (DDRP/WM) Development Department Recommended Plan/with Requested Modifications; (CRP/WM) Committee Recommended Plan/with Requested Modifications. Applicability to the plan alternative is identified as: (a) incorporated into the plan; (b) within the jurisdiction of another agency; and, (c) infeasible to implement.

Air

Significant Impacts

- o Increased air pollution due to increased vehicle travel and congestion.

Energy Consumption

Significant Impacts

- o Increased energy consumption.

Mitigation Measures (may not be fully mitigable)

- o Implement 1984 Fresno General Plan Energy Element (DDRP)(a), (CRP)(a), (DDRP/WM)(a) and (CRP/WM)(a).

Geologic, Seismic, Soils And Agricultural Land

Significant Impacts

- o Conversion of agricultural land.

Mitigation Measures (may not be fully mitigable)

- o Implement Urban Growth Management and property development standards (DDRP)(a)(b), (CRP)(a)(b), (DDRP/WM)(a)(b) and (CRP/WM)(a)(b).
- o Implement urban reserve designation and related policies/implementation measures 6-1.1, 6-2.1 and 6-2.2 to reduce the premature conversion of agricultural land to urban uses (DDRP)(a)(b), (CRP)(c), (DDRP/WM)(a)(b) and (CRP/WM)(c).
- o Generation of particulates with continued sand and gravel extraction and construction activities.
- o Generation of air pollutants due to combustion of organic fuels for heating and other urban activities.

- * Plan alternatives identified as: (DDRP) Development Department Recommended Plan; (CRP) Committee Recommended Plan; (DDRP/WM) Development Department Recommended Plan/with Requested Modifications; (CRP/WM) Committee Recommended Plan/with Requested Modifications. Applicability to the plan alternative is identified as: (a) incorporated into the plan; (b) within the jurisdiction of another agency; and, (c) infeasible to implement.

Mitigation Measures (may not be totally mitigated)

- o Incorporate air quality maintenance considerations in the preparation of plans (DDRP)(a), (CRP)(a), (DDRP/WM)(a) and CRP/WM)(a).
- o Plan for and modify regulations to allow integrated land uses (DDRP)(a), (CRP)(a), (DDRP/WM)(a) and (CRP/WM)(a).
- o Obtain on-site bus access areas (DDRP)(a), (CRP)(a), (DDRP/WM)(a) and (CRP/WM)(a).
- o Evaluate the appropriateness of a "transportation ordinance" and Freeway 41 "transportation corridor," implement traffic flow, transit and bicycle use improvements, and pursue contiguous urban expansion, urban infill, mixed use and density averaging per the Local Planning Ordinance (DDRP), (CRP)(c), (DDRP/WM)(a)(b) and (CRP/WM)(c).

Noise

Significant Impacts

- o Potential exposure of residents to excessive vehicle-generated noise.
- o Exposure of areas near the San Joaquin Riverbottom to sand and gravel extraction-generated noise.

Mitigation Measures (may not be fully mitigable)

- o Implement circulation policies (3-3.4, 3-3.6, 3-3.7, 3-3.8, 3-4.4, 3-4.5, 3-4.6 and 3-5.10) to reduce exposure to vehicle-generated noise including expressway area overlay zoning, truck routing, circulation design measures and 20-foot landscaped setbacks along expressways and arterials (DDRP)(a), (CRP)(a), (DDRP/WM)(a) and (CRP/WM)(a).

- * Plan alternatives identified as: (DDRP) Development Department Recommended Plan, (CRP) Committee Recommended Plan, (DDRP/WM) Development Department Recommended Plan/with Requested Modifications, (CRP/WM) Committee Recommended Plan/with Requested Modifications. Applicability to the plan alternative is identified as: (a) incorporated into the plan, (b) within the jurisdiction of another agency and (c) infeasible to implement.

LIST OF AGENCIES CONSULTED DURING THE EIR. PROCESS

City of Fresno

Development Department
Fire Department
Parks, Recreation and Community
Services Department
Police Department
Public Works Department

Local Agencies and Districts

Clovis Unified School District
Council of Fresno County Governments
Fresno Irrigation District
Fresno Metropolitan Flood
Control District

County of Fresno

Fresno County Environmental
Health Department
Fresno County Public Works and
Development Services Dept.
Fresno County Library
Fresno County Local Agency
Formation Commission
Fresno County Air Pollution
Control District

State Agencies

State of California -
Department of Fish and Game
Water Quality Control Board -
Central Valley Region
CalTrans District VI
State Clearinghouse-OPR

Federal Agencies

U. S. Fish and Wildlife Service
U. S. Department of Agriculture -
Soil Conservation Service
U. S. Army Corps of Engineers
U. S. Department of Interior -
Bureau of Reclamation
U. S. Postal Service

LIST OF PERSONS, ORGANIZATIONS AND PUBLIC AGENCIES
COMMENTING ON THE DRAFT EIR

Fresno County Local Agency Formation Commission

State of California Office of Planning and Research

State of California Native American Heritage Commission

City of Fresno Fire Department

State of California Department of Conservation

James N. Walton

Emory Wishon

Woodward Park Homeowners Association

County of Fresno Public Works and Development Services Department

City of Clovis Public Works Department

City of Fresno Public Works Department (City Engineer)

State of California Department of Fish and Game

CalTrans

Clovis Unified School District

COMMENTS ON DRAFT EIR

The numbers, which have been added to the left margin of the following comment letters, have been coded to correspond with the Response to Comments Section incorporated into this Final Environmental Impact Report.

**Local Agency
Formation Commission**

July 6, 1989

Commissioners:
Chairman Larry Wilder
Deran Koligian
Vernon Conrad
Tony Silva
Stan King

Executive Officer:
Marvin L. Panter

Rayburn Beach
Planning Division
City of Fresno
2326 Fresno St.
Fresno, Ca 97321

Subject: Draft EIR - Woodward Park Plan

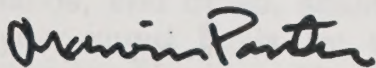
Dear Mr. Beach:

Commenting for the Local Agency Formation Commission, the proposed Alternative "A" recommendation which proposes an urban reserve area seems to address both the environmental and service issues, whereas Alternative "B" ignores what we know about service problems and issues related to air and water quality, water quantity, and preservation of farm lands.

The commission will be a responsible agency under CEQA as annexations to the city are proposed in this area. Annexation initial studies should incorporate information, impacts, mitigation measures, and alternatives in the Final EIR.

Consequently, following a recommendation made in a recent annexation committee report considered by the city and by the commission, I would suggest a workshop for the commission to consider the plan and EIR, giving the city opportunity to present the growth issues in the Woodward Park area. If the city agrees I will request a workshop date of the commission.

Sincerely,



Marvin L. Panter
Executive Officer

MLP:lm

0393L/13

Memorandum

To : John Keene
State Clearinghouse
Office of Planning and Research
1400 Tenth Street, Room 121
Sacramento, California 95814

Date : June 22, 1989

Place : Sacramento

From : Department of Food and Agriculture--1220 N Street, P.O. Box 942871
Sacramento, CA 95814-0001

Subject: SCH No. 88020817 -- City of Fresno Woodward Park Community Plan

The California Department of Food and Agriculture (CDFA) has reviewed the Draft Environmental Impact Report (DEIR) concerning the above referenced project which would involve the adoption and implementation of a community plan.

The CDFA recommends approval of the DEIR.

Sincerely,



Donna McIntosh
Graduate Student Assistant
Agricultural Resources Branch
(916) 322-5227

cc: Fresno County Agricultural Commissioner
California Association of Resource Conservation Districts

RECEIVED
JUN 22 1989

NATIVE AMERICAN HERITAGE COMMISSION

15 CAPITOL MALL, ROOM 288
ACRAMENTO, CALIFORNIA 95814
(916) 322-7791

June 19, 1989

Mr. Ray Beach, Senior Planner
Development Department
City of Fresno
2326 Fresno Street
Fresno, California 93721

re: SCH# 88020817-Woodward Park Community Plan Update

Dear Mr. Beach:

A record search of the sacred lands file at this office failed to indicate the presence of special Native American cultural resources in the immediate project area. The sacred lands file is comprised of culturally sensitive information which has been supplied to the Native American Heritage Commission by individuals, Indian tribal groups or organizations, traditionalists and elders.

The sacred lands file is comprised of cultural resource information which is confidential and is not a part of any other archaeological or ethnological collection, information center, or repository. The absence of specific site information in the sacred lands file does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

The region around that particular section of the Valley is part of what would have been more than 5,000 square kilometers of extensive wetlands, and broad, shallow lakes. The area would have been occupied on a year-round basis by various Indian tribal groups for approximately ten thousand years. The siltation of the region has caused numerous prehistoric archaeological sites to be buried under, what is now, the existing grade.

The concern of the Native American Heritage Commission is in those areas which have either been developed for a number of years, or in this case, used for agricultural purposes, and thought to be free of cultural resources.

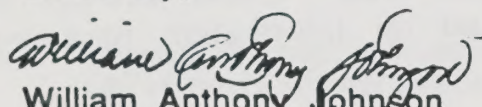
1 [There have been Native American cultural resources, including old burials, discovered within the recent past, in the Valley. The possibility of discovering previously detected cultural resources should be addressed in any environmental document from that region. These sites do not always have surface indications of their presence. Archaeological sites have been discovered in former floodplains, and adjacent to drainages at depths exceeding eight feet below the present ground surface.

The California Environmental Quality Act, Appendix K, deals with the discovery of archaeological sites and the procedures to follow. It also contains the instructions to follow when human remains are found during any phase of development.

The Native American Heritage Commission has prepared a pamphlet for use by lead agencies, planners, developers and property owners. It provides an easy-to-read breakdown of the California Codes pertaining to Native American human remains and their disposition. I have included a copy of this brochure for your information.

If you have any questions or need additional information, please contact this office.

Sincerely,


William Anthony Johnson
Staff Analyst

Enclosure

cc: John Keene, SCH

FRESNO FIRE DEPARTMENT

June 23, 1989

MEMORANDUM

TO: NICK YOVINO, Development Manager
Development Department

ATTENTION: RAYBURN R. BEACH, Senior Planner
General & Community Planning Section

FROM: BUD ARMSTRONG, Fire Chief *Ba*

SUBJECT: DRAFT EIR NO. 10100--WOODWARD PARK COMMUNITY PLAN UPDATE

In response to your request for review of the DRAFT EIR No. 10100--Woodward Park Community Plan Update, the Fire Department does have some major concern regarding fire protection.

In a June 23, 1989, memorandum, sent to City Manager Jim Aldredge (copy attached), there were four specific issues that the Fire Department felt were in immediate need of resolution. These issues were further qualified in the June 22, 1989, memorandum from the Fire Department's Operations Chief James O. Nance (copy attached).

The immediate concerns regarding the Woodward Park are as follows:

- 2 ☐ 1. Identification of permanent site for Fire Station No. 21.
- 3 ☐ 2. Questionable adequacy of fire flow (water supply for firefighting purposes).
- 4 ☐ 3. Conflict in truck company locations in comparison with locations as specified in the community plan.
- 5 ☐ 4. Immediate need to create a thoroughfare to assist and assure acceptable fire response into the Woodward Park Area.

If you have any further questions, please contact Chief Nance at X1542 or Fire Marshal Rohde at X1023.

BA/JD:smb-2489C/0062C

Attachments

pc: J. Downs, Assistant Fire Chief
J. Nance, Operations Chief
D. Rohde, Fire Marshal

RECEIVED
1989 JUN 29 AM 10:20
FIRE DEPT.
CITY OF FRESNO

FRESNO FIRE DEPARTMENT

June 23, 1989

MEMORANDUM

TO: JAMES E. ALDREDGE, City Manager

ATTENTION: GEORGE A. KERBER, Director, Development Department
MARVIN D. JOHNSON, Director, Public Works Department

FROM: BUD ARMSTRONG, Fire Chief *BA*

SUBJECT: CRITICAL ISSUES ENCUMBERING WOODWARD PARK AREA FIRE PROTECTION

Attached is a copy of a June 21, 1989, memorandum from the Fire Department's Operations Chief James O. Nance. His memorandum addresses some major concerns identified in response to the Woodward Park Community Plan. The issues are directly related to fire protection in relationship to both existing and future developments.

The immediate concerns are as follows:

1. Identification of permanent site for Fire Station No. 21.
2. Questionable adequacy of fire flow (water supply for firefighting purposes).
3. Conflict in truck company locations in comparison with locations as specified in the community plan.
4. Immediate need to create a thoroughfare to assist and assure acceptable fire response into the Woodward Park Area.

The Fire Department would like to recommend that a meeting be scheduled with the City Manager's office, the Development Department, Public Works Department, and the Fire Department to address these concerns and assure administrative unity.

BA/JD:smb-2488C/0062C

Attachment

FRESNO FIRE DEPARTMENT

June 22, 1989

MEMORANDUM

TO: BUD ARMSTRONG, Fire Chief

THROUGH: J. DOWNS, Assistant Fire Chief *JD*

FROM: J. O. NANCE, Operations Chief *JON*

SUBJECT: WOODWARD PARK COMMUNITY PLAN

A major impact on the Fire Department is the projected limitation of adequate water supplies in the Woodward Park Community Plan area. Although the plan does offer a requirement that adequate water supplies are available as a condition of new development, it does not recognize that forced cutbacks in water production will leave us with existing structures to protect.

One way to mitigate this type of occurrence is to require new wells, which are a condition of development, be drilled, tested for potability, and certified to provide the necessary flow prior to approval of the project. Another mitigative measure is to require sprinkler systems in all new commercial and residential occupancies within the new plan area. This idea was vetoed by the City's staff and the Citizen Advisory Committee.

Although the plan erroneously states that a truck company is housed at Fire Station No. 13, this is certainly a viable proposal. The development forecasts in the plan includes a significant number of mid-rise and large commercial occupancies in the Woodward Park community.

The permanent site for Fire Station No. 21 will be influenced primarily by the final adoption of the major traffic arterials in the northern portion of the plan area. In order to provide adequate emergency response for this area, I recommend that a major arterial be plan-lined to provide a response corridor between North Millbrook and Willow Avenues. It should be located generally along International Avenue alignment. A permanent site for Station No. 21 should also be secured in the immediate vicinity of Maple and International Avenues.

JON:mc

0700R/0024R

Memorandum

To : Dr. Gordon F. Snow
Assistant Secretary for Resources

Date : June 27, 1989

Mr. Ray Beach, Senior Planner
City of Fresno
2326 Fresno Street
Fresno, CA 93721

Subject: Draft Environmental
Impact Report (EIR)
for Woodward Park
Community Plan Update
SCH# 88020817

From : Department of Conservation—Office of the Director

The Department of Conservation is responsible for monitoring farmland conversion on a statewide basis, and administering the Williamson Act. The Department has reviewed the City of Fresno's Draft Community Plan and Draft EIR for the project referenced above. The Department has not concurrently reviewed the source documents incorporated by reference.

The project is an update of the Woodward Park Community Plan providing a five-year growth plan. The plan area encompasses an 8,290-acre primarily vacant or nonurban area (3,622 acres vacant; 1,885 acres agricultural [orchards, vineyards, pasture, row crops]). Williamson Act contracts are in effect on 727 acres. The Department's 1986 Fresno County Important Farmland Map (attached) indicates that the Plan area includes Prime Farmlands, Farmlands of Statewide Importance and Farmlands of Local Importance.

The Draft EIR recognizes that the loss of agricultural land is an unavoidable impact of the project. To better document this impact, the Department recommends that the Final EIR and Final Community Plan provide the following additional or clarifying information.

Woodward Park Community Plan Draft EIR

- 6 The loss of prime agricultural land should be identified and treated as a significant environmental impact. The Draft EIR provides some quantitative data on the amount of Prime Farmland (page 56); however, the acreage figure appears incorrect. The
- 7 Final EIR should provide acreage information that corresponds to the 43% of project area referenced, and that corresponds to Figure 6.

Agricultural Character, Williamson Act and Land Conversion Issues

- 8 - Much of the information on geology, seismicity, soils and agricultural lands has been incorporated by reference from several unspecified documents. Although these documents are listed as sources in the Appendix, it would assist the reader to summarize the pertinent portions of each document or to provide a specific reference, e.g., document name and pages.
- 9 - Include references to Farmland of Local Importance in the project area. Farmland of Local Importance for the County has been defined by the Board of Supervisors as:
- "All farmable lands within Fresno County that do not meet the definitions of Prime, Statewide, or Unique."

- 10 - Show the boundaries of the agricultural preserves, number of acres and type of land in each preserve (i.e., prime/non-prime), and contracted areas in both the project area and adjacent areas. Figure 7 could be modified to include this information.
- 11 - Discuss the impacts of Williamson Act contract cancellation or nonrenewals on nearby properties that are also under contract.
- 12 - Discuss the specific requirements for contract cancellation (Government Code Sections 51282 and 51284, attached). Although the project does not list contract cancellations as an action to be taken, this is an option (if specified conditions are met) for terminating a contract.
- 13 - Discuss cumulative impacts of farmland conversion in Fresno County resulting from this and similar projects. According to the Department's 1984 To 1986 Farmland Conversion Report Important Farmland (Prime, Statewide, Unique, Local and Grazing Land) acreage in mapped portions of the County has decreased by 6,000 acres during the period July 1984 to July 1986. The agricultural land conversion proposed in this project would add substantially to this figure. In considering cumulative impact, the Final EIR should look back at least the last five to ten years, as well as forward into the foreseeable future.

Mitigation Measures and Alternatives

- The Draft EIR notes several mitigation measures for farmland conversion. If the Citizens Advisory Committee's alternative is selected, there may no feasible mitigations for farmland conversion. Some general mitigation measures which could be recommended for the lesser impact alternative, and for other similar projects, are:
- 14 - Directing urban growth to lower-quality soils in order to protect prime agricultural land.
- Increasing densities or clustering residential units to allow greater portions of the site to remain in agricultural production.
- Protecting other, existing farmland of equivalent, or better, quality through planning policy that relies on an active and strategic use of the Williamson Act.
- Implementing right-to-farm ordinances to diminish nuisance impacts of urban uses on neighboring agricultural operations, and vice-versa.
- Adopting a farmland protection program, under the auspices of a farmland trust, that utilizes such land-use planning tools as transfer and purchase of development rights, or conservation easements.

15 The Department also recommends that a soil erosion and sedimentation control plan be developed by a Certified Erosion and Sediment Control Specialist for erosion-prone areas of the project. The erosion control plan should outline specific control strategies, such as the establishment of soil loss standards, planning options that avoid sensitive or unstable sites, community education, erosion and sedimentation control practices and ordinances, maintenance and enforcement programs, and rehabilitation measures. We also recommend that the plan be reviewed and approved by the Sierra Resource Conservation District.

16 Finally, the City should consider a discussion of any monitoring/reporting criteria ensuring compliance with adopted mitigation measures.

Draft Woodward Park Community Plan

17 The Department recommends consideration of the following to provide consistency within the Community Plan.

- Provide buffering provisions for noncommercial land use conflicts, e.g., agricultural vs. residential.

18 - Goal 2-5 addresses preservation of prime agricultural lands and protection of existing farming operations from encroaching urbanization. Policies and implementation measures are listed supporting this goal. The two project alternatives, however, are inconsistent with this goal. The staff proposal recommends 1,353 acres for Urban Reserve providing for interim agricultural land use, and the Committee proposal does not provide for any agricultural use. Goals 6-1.1 and 6-2.2, referencing Urban Reserve lands, should be referenced with Goal 2-5, since these goals are interrelated. If the Urban Reserve designation is not adopted then, the last two goals would need revision.

The Department appreciates the opportunity to comment on the Draft Community Plan and Draft EIR. We hope that the farmland conversion, Williamson Act, and soil erosion issues are given adequate consideration in the Final EIR. If I can be of further assistance, please feel free to call me at (916) 322-5873.

Dennis J. O'Bryant

Dennis J. O'Bryant
Environmental Program Coordinator

DJO:EK:efh
Attachments

cc: Ken Trott, Office of Land Conservation

7450 N. Willow Avenue
Clovis, California 93612
June 27, 1989

City of Fresno
Development Department
2326 Fresno Street
Fresno, California 93721

Attn: Mr. Rayburn Beach, Supervising Planner

Re: Draft Woodward Park Community Plan Update
and E.I.R.

As the owner of property located at the north east corner of N. Maple and E. Nees Avenues (APN 403-070-30), I have been concerned as to the ultimate use of my particular parcel located at the juncture of an arterial and collector streets.

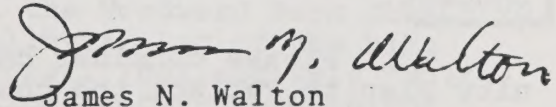
I have also been aware of the reluctance of staff as well as the commission and council to encourage the proliferation of office and/or commercial uses at many of the heavily traveled intersections.

19 At several of the Woodward Park Community Plan Update meetings some discussion was directed toward the possibility of retaining the residential designations of these intersections with the possibility of allowing some limited and restricted uses for the benefit of the area's residents.

The possibility of day care centers in these areas was discussed as an alternative and the possibility of similar types of residential uses or services was another.

It would be highly desirable to promote these alternatives and that they not be ignored in haste to adopt a new plan.

Sincerely,


James N. Walton

cc: Mayor Karen Humphrey
Councilman Rod Anaforian

Mr. Nick Yovino
June 27, 1989
Page 2

Alluvial but does not have any continuous route for a bike path or jogging or pedestrian trail as consistent with the Multi-Purpose Trail concept.

2. Aesthetics will be improved along Fresno Street, as the Multi-Purpose Trail with a four-foot-wide landscape border along both sides and other landscaping will create a more attractive streetscape.

3. Park access is an inappropriate goal for a bike path or jogging route compared with continuous routes.

4. The connection to the Kashian Multi-Purpose Trail will create a far more useful activity corridor than the discontinuous bike trail to the park.

5. The presence of a continuous bicycle corridor along Fresno Street will create a greater opportunity for bicycle commuter traffic.

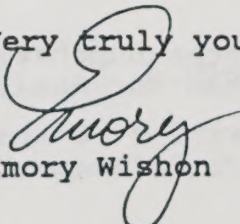
6. Safety of bicyclists is enhanced by moving the path to a more visible and lighted site than the center-of-the-block alignment.

7. Increased bicycle, jogging and walking usage is likely to arise from the greater number of people who will see the path along Fresno Street.

Graham Development will be willing to relocate the bicycle path as planned from the interior of its eastern border to the western border of its property and to construct the improvements required for the landscaping and pedestrian and bicycle lanes consistent with the Multi-Purpose Trail concept.

Please consider changing the Woodward Park Community Plan to reflect the changes recommended.

Very truly yours,


Emory Wishon

EW:kh

MOTSCHIEDLER, MICHAELIDES & WISHON

ATTORNEYS AT LAW

1255 WEST SHAW AVENUE

SUITE 103

FRESNO, CALIFORNIA 93711

TELEPHONE (209) 227-3524

FAX (209) 227-7419

J. CARL MOTSCHIEDLER

PHILLIP G. MICHAELIDES

A. EMORY WISHON III

JACK HINDMARSH

JAMES A. MCKELVEY

C. WILLIAM BREWER

June 27, 1989

VIA HAND DELIVERY

Mr. Nick Yovino
Development Manager
Community and General
Planning Division
Development Department
City of Fresno
2326 Fresno Street
Fresno, California 93721

Re: Comments to Draft EIR
for Woodward Park Community Plan

Dear Nick:

The Woodward Park Community Plan draft of March 16, 1989 includes a proposed bikeways plan (the "March 16 Bikeways Plan") on page 48. Among the bikeways indicated on that plan is one between Herndon and Alluvial Avenue on an alignment approximately midway between Fresno Street and First. The alignment was selected to provide bicycle access to the community park envisioned for the south side of Alluvial midway between Fresno and First.

On behalf of Graham Development Company, one of the affected property owners with frontage both on the proposed bikeway in the March 16 Bikeways Plan and on North Fresno Street, I want to propose that the Woodward Park Community Plan relocate the Herndon to Alluvial leg of the bike path/multi-purpose pedestrian trail (collectively "Multi-Purpose Trail") from its existing center-of-the-block alignment onto the properties on the east side of Fresno Street. The alignment on the east side of Fresno Street is a preferable alignment for the following reasons:

1. It is integrated into the Kashian Multi-Purpose Trail on Fresno Street from Alluvial north. The March 16 Bikeways Plan connects Herndon to the park at



Woodward Park

Homeowners Association

P.O. Box 3885

Pinedale, CA 93650-3885

July 3, 1989

Fresno City Council

RE: Woodward park Community Plan

Comments by Woodward Park Homeowners Assn.

The Woodward Park Homeowners Association Board of Directors voted to support Staff Plan, Alternate A of the Woodward park Community Plan Update at its June 15, 1989 meeting because:

21 Since the Update Committee was disbanded the water situation has become more critical, not only in the Woodward park area but throughout the City. Testimony has been given that the water supply is not sufficient due to ground water contamination, low water yields, and contamination negatively affecting the quality of water in adequate supply.

While it might be desirable to urbanize to Willow and Copper someday, we do not have confidence that the water system will be adequate due to contaminants. A risk is being taken that current residents will not have enough quality drinking water.

22 In addition to our concern about water, a 4-18-89 Sewer Workshop report says the Herndon Cornelia system was not designed to provide sewer capacity to all the area through which it passes. An E.I.R. is imperative. Sewer capacity must be monitored project by project so that we do not have a sewer crisis to match our water crisis.

We repeat, of the two areas of concern, water and sewer, water is the most critical because it is possible that no amount of available money can solve this problem.

We support Staff's Plan, Alternate A, because it will work with the existing sewer with very minor modifications, whereas the Committee Plan, Alternate B, will take major alterations.

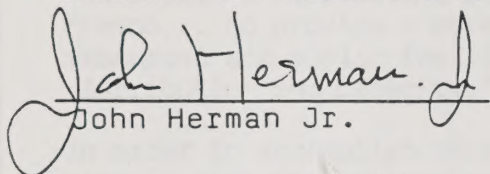
In May 40% of the residential building permits issued in the City were for the Northeast area. Between May 2 and June 14, 1989, seventy one (71) units over the 4.98 units per acre maximum allowed under the Update have been approved. This shows lack of constraint in view of water and sewer problems.

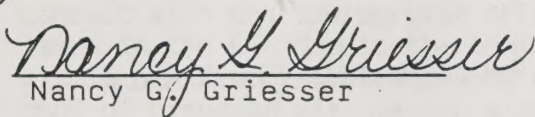
23 The Update is facing 17 modifications for land use designations denied by the Committee and reinstated April 4 when the Update was initiated. These additions are not compatible with either the Staff or Committee's recommendations and would further impact water, sewer, and circulation.

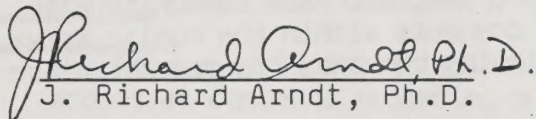
We earnestly request you approve Staff Plan, Alternate A, for the five years it will be in effect.

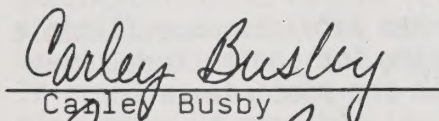
Sincerely,

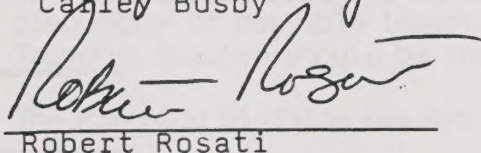
Woodward Park Homeowners Assn.

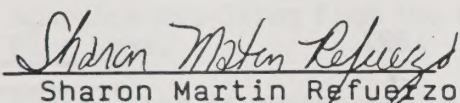

John Herman Jr.


Nancy G. Griesser

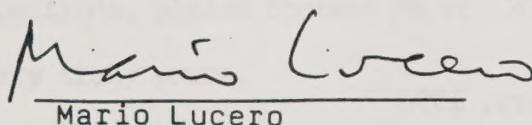

J. Richard Arndt, Ph.D.

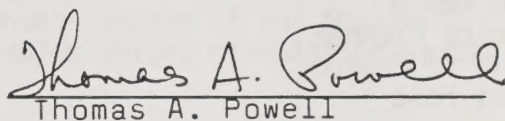

Carley Busby

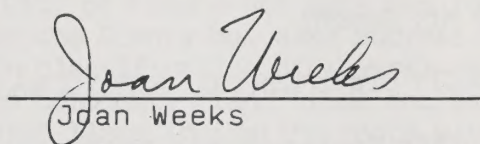

Robert Rosati

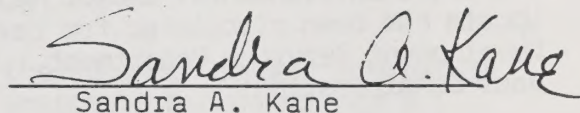

Sharon Martin Refuerzo

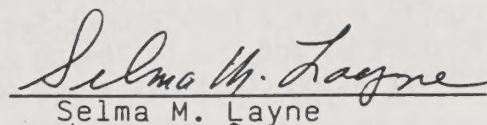

Mark Priano

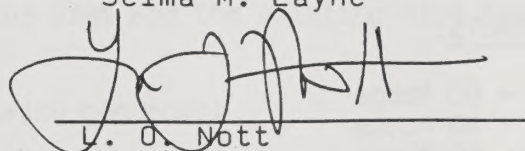

Mario Lucero

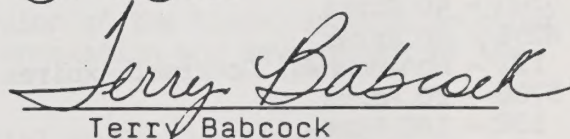

Thomas A. Powell

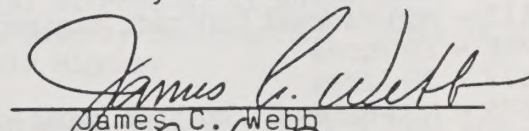

Joan Weeks

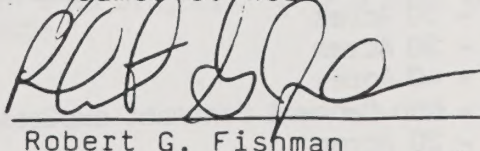

Sandra A. Kane


Selma M. Layne


L. O. Nott


Terry Babcock


James C. Webb


Robert G. Fishman

June 30, 1989

Ray Beach
Senior Planner
City of Fresno
City Hall

Dear Mr. Beach:

SUBJECT: Draft EIR NO. 10100 - Woodward Park Community Plan Update

The Draft Environmental Impact Report on the Woodward Park Community Plan Update has been circulated for review and comments within the Public Works & Development Services Department. The following comments are presented for your consideration:

1. Public Works & Development Services Staff has provided maps (Exhibit A and Exhibit B) and the following list, indicating the agricultural land conservation contracts which are located in the plan area:

CONTRACTS:

6299 - 80 Acres
6297 - 40 Acres
6300 - 40 Acres
6298 - 80 Acres
121 - Non-Renewal Contract expires February, 1997
5708 - 20 Acres
132 - 160 Acres
113 - Non-Renewal Contract expired February, 1988
5748 - 20 Acres
677 - 20 Acres
676 - Non-Renewal contract expired February, 1989
4314 - 50 Acres
674 - 20 Acres
678 - 40 Acres
675 - Non-Renewal Contract expires February, 1996
366 - 20 Acres
1367 - 68 Acres

2. Public Works & Development Services Staff has indicated that the Plan area is not within the review area of a public use airport.
3. The Development engineering Section has commented as follows:

The Draft Community Plan and Draft EIR have indicated at numerous points significant adverse impacts on the existing transportation and circulation elements within this Community Plan and yet have not once addressed specifically the impacts and mitigation measures on those roads which are still under the County's jurisdiction. It was noted in this report that about one-third (1/3) of the area within this Community Plan, basically towards the east and north, is still within the County's jurisdiction.

24 On Page 56, Section 6-2.1 of the Draft Woodward Park Community Plan, it is stated that one of the policies and implementation measures is to "Establish a cooperative research and planning program with the County of Fresno... to provide a more thorough understanding of the following resources and public facilities...C. Major street circulation system distribution and capacity."

In order to accomplish this goal, the City of Fresno not only has to consult with the appropriate offices in the County but also address this issue in the EIR due to the conflict in classification of several roads within the Circulation Elements of this Community Plan. (See enclosed copy of proposed circulation with colored lines indicating roads with conflicting classification.) (Exhibit C)

- 25 4. The Resources Division indicates that the subject document adequately addresses concerns regarding possible environmental impacts of a 'geologic-related nature (e.g. ground water, seismic safety, slope stability, etc.). The discussion of proposed changes in policies toward transfer stations (see page 68, Section 7-8.1, and 7-8.4) is inadequate. If transfer stations are to be excluded from the plan area, then a discussion of possible impacts to the area and the existing Rice Road Transfer Station should be included.

5. The Planning Division has the following comments:

26 The draft EIR should include a discussion of the fiscal impacts on other agencies resulting from the ultimate annexation and development of the Plan area.

27 Friant road is designated as an arterial at Freeway 41 which is inconsistent with the remainder of the roadway designation. There is also no discussion of Friant Road as a Scenic Highway.

Thank you for the opportunity to comment on this project. If you have any questions, please contact me at (209)453-5055.

Very truly yours,

Jerry K. Boren
Development Services Manager

Leslie Kline

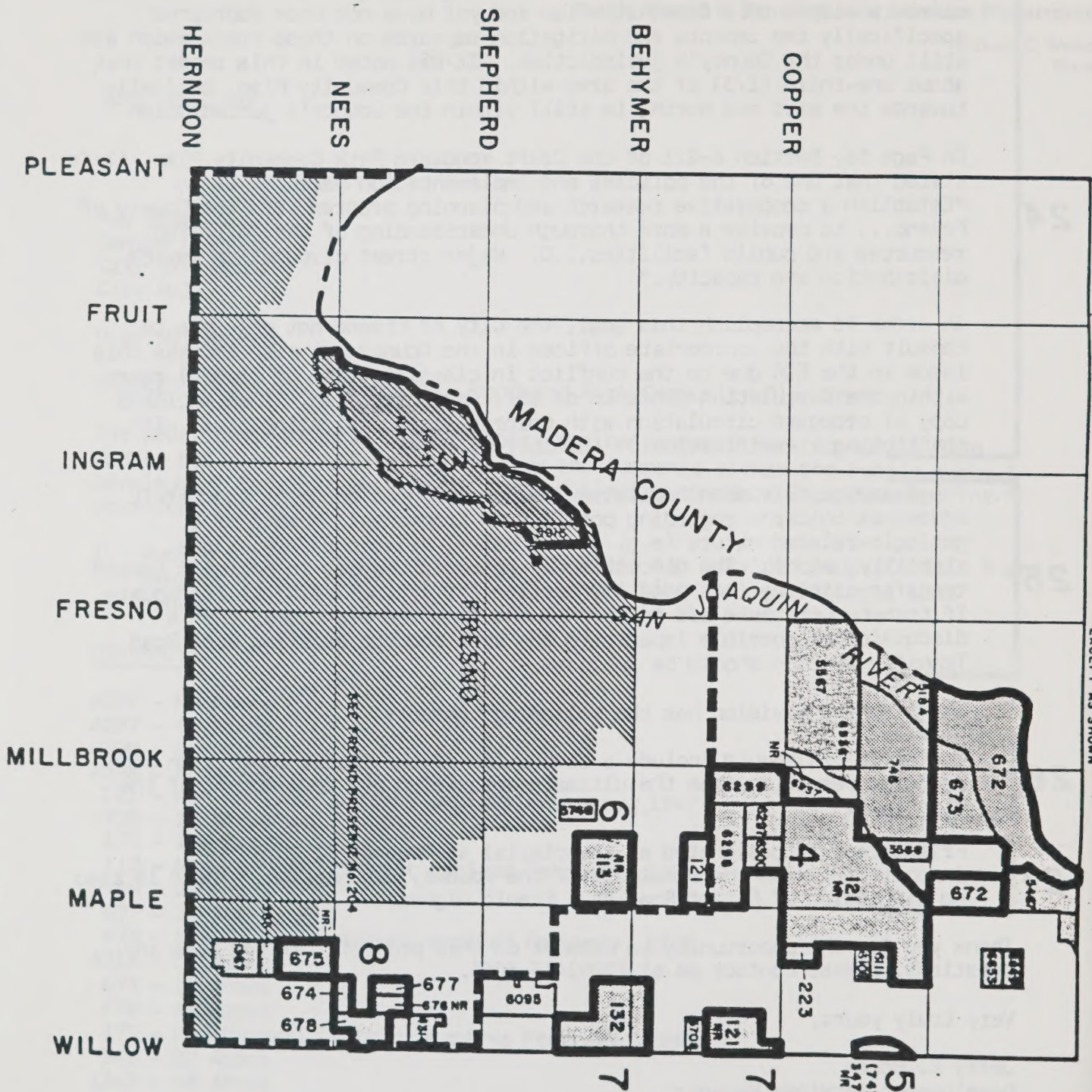
Leslie Kline
Staff Analyst II

LK:ir:8872K

Attachments

FRESNO-CLOVIS No. 46

EXCEPT AS SHOWN



CONTRACTUAL AND EASEMENT LIMITS ON LAND USE

FRESNO COUNTY CALIFORNIA

MARCH 1, 1968

AMENDMENTS

NO.	DATE ADOPTED	NO.	DATE ADOPTED
223	2-4-68	1367	2-28-70
672	2-28-69	1643	-
673	2-28-69		
674	2-28-69		
675	2-28-69		
676	2-28-69		
677	2-28-69		
678	2-28-69		
746	2-28-70		
1366	2-18-70		

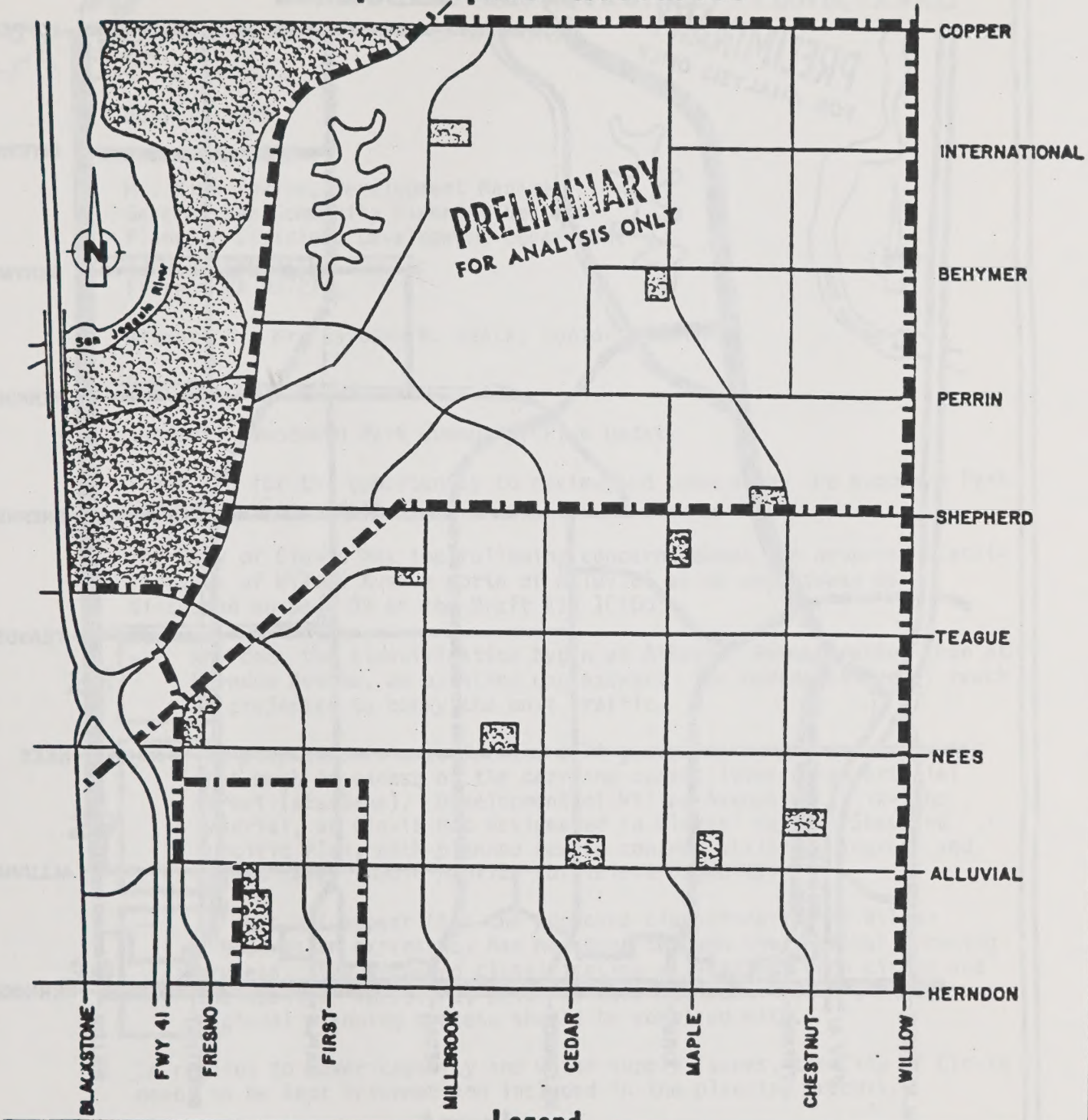
Agreement or Contract and File No.

Boundary of other owners' labeled

Typical Numbering of Sections Within Township

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	524	525	526	527	528	529	530	531	532	533	534	535	536	537	538	539	540	541	542	543	544	545	546	547	548	549	550	551	552	553	554	555	556	557	558	559	560	561	562	563	564	565	566	567	568	569	570	571	572	573	574	575	576	577	578	579	580	581	582	583	584	585	586	587	588	589	590	591	592	593	594	595	596	597	598	599	600	601	602	603	604	605	606	607	608	609	610	611	612	613	614	615	616	617	618	619	620	621	622	623	624	625	626	627	628	629	630	631	632	633	634	635	636	637	638	639	640	641	642	643	644	645	646	647	648	649	650	651	652	653	654	655	656	657	658	659	660	661	662	663	664	665	666	667	668	669	670	671	672	673	674	675	676	677	678	679	680	681	682	683	684	685	686	687	688	689	690	691	692	693	694	695	696	697	698	699	700	701	702	703	704	705	706	707	708	709	710	711	712	713	714	715	716	717	718	719	720	721	722	723	724	725	726	727	728	729	730	731	732	733	734	735	736	737	738	739	740	741	742	743	744	745	746	747	748	749	750	751	752	753	754	755	756	757	758	759	760	761	762	763	764	765	766	767	768	769	770	771	772	773	774	775	776	777	778	779	780	781	782	783	784	785	786	787	788	789	790	791	792	793	794	795	796	797	798	799	800	801	802	803	804	805	806	807	808	809	810	811	812	813	814	815	816	817	818	819	820	821	822	823	824	825	826	827	828	829	830	831	832	833	834	835	836	837	838	839	840	841	842	843	844	845	846	847	848	849	850	851	852	853	854	855	856	857	858	859	860	861	862	863	864	865	866	867	868	869	870	871	872	873	874	875	876	877	878	879	880	881	882	883	884	885	886	887	888	889	890	891	892	893	894	895	896	897	898	899	900	901	902	903	904	905	906	907	908	909	910	911	912	913	914	915	916	917	918	919	920	921	922	923	924	925	926	927	928	929	930	931	932	933	934	935	936	937	938	939	940	941	942	943	944	945	946	947	948	949	950	951	952	953	954	955	956	957	958	959	960	961	962	963	964	965	966	967	968	969	970	971	972	973	974	975	976	977	978	979	980	981	982	983	984	985	986	987	988	989	990	991	992	993	994	995	996	997	998	999	1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011	1012	1013	1014	1015	1016	1017	1018	1019	1020	1021	1022	1023	1024	1025	1026	1027	1028	1029	1030	1031	1032	1033	1034	1035	1036	1037	1038	1039	1040	1041	1042	1043	1044	1045	1046	1047	1048	1049	1050	1051	1052	1053	1054	1055	1056	1057	1058	1059	1060	1061	1062	1063	1064	1065	1066	1067	1068	1069	1070	1071	1072	1073	1074	1075	1076	1077	1078	1079	1080	1081	1082	1083	1084	1085	1086	1087	1088	1089	1090	1091	1092	1093	1094	1095	1096	1097	1098	1099	1100	1101	1102	1103	1104	1105	1106	1107	1108	1109	1110	1111	1112	1113	1114	1115	1116	1117	1118	1119	1120	1121	1122	1123	1124	1125	1126	1127	1128	1129	1130	1131	1132	1133	1134	1135	1136	1137	1138	1139	1140	1141	1142	1143	1144	1145	1146	1147	1148	1149	1150	1151	1152	1153	1154	1155	1156	1157	1158	1159	1160	1161	1162	1163	1164	1165	1166	1167	1168	1169	1170	1171	1172	1173	1174	1175	1176	1177	1178	1179	1180	1181	1182	1183	1184	1185	1186	1187	1188	1189	1190	1191	1192	1193	1194	1195	1196	1197	1198	1199	1200	1201	1202	1203	1204	1205	1206	1207	1208	1209	1210	1211	1212	1213	1214	1215	1216	1217	1218	1219	1220	1221	12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Woodward Park Community Planning Area Open Space Resources

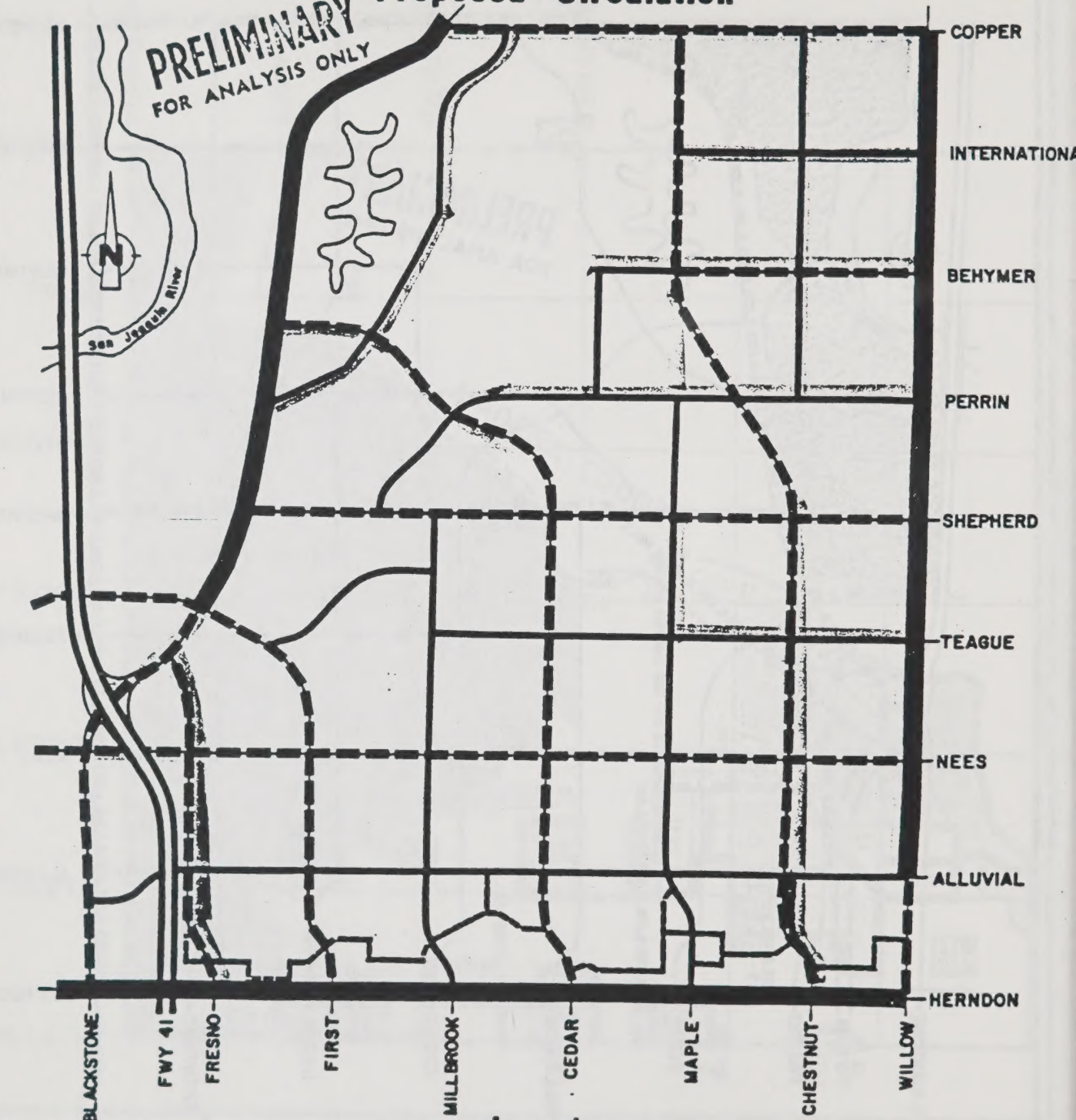


Legend

- Bike Path / Multi-Purpose Pedestrian Trail
-  Parks / Ponding Basins / Riverbottom

Woodward Park Community Planning Area Proposed Circulation

PRELIMINARY
FOR ANALYSIS ONLY



Legend

- Freeway
- Expressway
- Arterial

- Collector
- Herndon corridor local street
- CONFLICTS BETWEEN COUNTY AND CITY CIRCULATION ELEMENT.



CITY OF CLOVIS

CITY HALL • 1033 FIFTH STREET • CLOVIS, CA 93612

July 5, 1989

Mr. Nick Yovino, Development Manager
General and Community Planning Section
Planning Division, Development Department
2326 Fresno Street
Fresno, CA 93721

Attention: Mr. Rayburn R. Beach, Senior Planner

Dear Mr. Yovino:

Subject: Woodward Park Community Plan Update

Thank you for the opportunity to review and comment on the Woodward Park Community Plan update.

The City of Clovis has the following concerns about the proposed classification of Willow Avenue north of Alluvial as an expressway as discussed on page 35 of the Draft EIR 10100:

28 -- Why does the classification begin at Alluvial Avenue rather than at Herndon Avenue, an existing expressway? The Herndon/Alluvial reach is projected to carry the most traffic.

29 -- The projected volumes for the 1984 general plan densities are not that much in excess of the carrying capabilities of an arterial street (six-lane). Development of Willow Avenue as a six-lane arterial, as Clovis has designated in Clovis' Herndon/Shepherd Specific Plan, with planned access control utilizing ingress and egress lanes should provide sufficient capacity.

30 -- It does not appear that the proposed classification of Willow Avenue as an expressway has not gone through the regional planning process. The proposed classification will affect both cities and the County. Therefore, prior to such reclassification, the regional planning process should be complied with.

In regards to sewer capacity and water supply issues, the City of Clovis needs to be kept informed and included in the planning process.

Very truly yours,

Leon P. Lancaster
Director of Public Works

July 5, 1989

TO: Ray Beach, Senior Planner
Development Department

FROM: Marvin D. Johnson, Director
Public Works Department

SUBJECT: Draft EIR 10100--Woodward Park Community Plan
Update--Edited Edition

The Public Works Department has reviewed this draft and has the following general comments:

Traffic

31

We believe that "inadequate vehicular circulation systems" is overstated in both the Plan and the DEIR. The City's land use practices in the Woodward Park area, rather than the River, as suggested in the report, allowed disruption of the grid system. The only facility that cannot be brought to an acceptable level in the 1984 General Plan is Herndon Avenue. Herndon will be a problem no matter what this Plan does.

Sewer

32

Capacity problems are relative and probably overstated in both documents. The Northeast Feasibility Study identifies a sewer connection charge of \$1,175 per equivalent residential unit. This would provide sufficient capacity for growth at 10 units per acre and capacity for the planned growth in Clovis. The Black and Veatch Sewer Study and subsequent analysis by staff identifies a fee of approximately \$700 per residential unit will be needed to provide the capacity enhancements needed to serve the land uses proposed in the plan.

Sewer capacity problems are monetary problems. It is questionable that if when considering our low sewer user fees, a \$1,200 connection charge on a \$100,000+ is such a big deal.

Water

The discussion of water problems is generally well stated. However

33

our major problem is Water Quality. Water Supply is secondary and solvable if there is not a quality problem. Since the Plan is on a 5 year plan, it may not be necessary to deal with surface treatment at this time. However, in the long run surface treatment is mandatory in our opinion.

We also have a number of specific comments.

Page 11, Paragraph 1

34

This concept does not deal with the expressed future needs of Clovis. Maximization of sewer capacity will cost \$3 million, or \$700/unit (including the Grantland line).

Page 11, Paragraph 2 and 3

35

It is clear that well-head treatment is now required on the City wells in the area.

"However, this supply will be needed, and is utilizable at substantially lower costs, to possibly stem DBCP intrusion...New development ~~may~~ will be required to be metered."

Page 16, Paragraph 1

36

We now know for certain that well-head treatment and, possibly, surface water treatment, will be necessary. This section appears to deal with the monetary costs associated with groundwater clean-up. However, we will also have monetary costs for additional recharge and surface treatment.

Page 41, Paragraph 1

37

To state that the normal grid system is incomplete primarily due to the proximity of the river is misleading. Land use planning allowed the incomplete grid system. First Street and Teague Avenue were not extended, as was possible, through the Kashian and Deverian subdivisions south of Shepherd. We allowed Wilson to avoid the grid. The Grupe developments also disrupted the grid pattern. It is true that the river disrupts the grid, but no traffic enters the area from the north and west.

You mention utilization of the Freeway 41 corridor and Cedar Avenue but fail to mention Willow Avenue. If the gap is closed (Measure "C" money is programmed for Willow), Willow will be the longest continuous roadway from Route 99 to Friant Road.

Page 42, Exhibit

38

Why make the incomplete grid worse? We believe that International and Cedar should be extended. (See the attached letter from the Traffic Engineering Division.)

Page 45, No. 3-4.3

39

To allow parking on collectors will conflict with the collector lanes shown in the Bikeway element. This will require a new collector standard.

Page 45, No. 3-4.10 (added)

40

All new arterials shall provide six travel lanes.

Page 47, No. 3-6.4

This will require new Arterial and Collector standards (additional right-of-way). Arterials with 6 lanes and 10' of bike lanes will have a minimum right-of-way width of 124 feet.

Collectors to provide both parking (as indicated in this plan) and 10' of bike lanes must have a minimum right-of-way width of 94'.

41

Arterial Half-Width

Collector (half-width)

8' Median
36' Lanes
8' Bike Lanes & Gutter
or Parking
10' Sidewalk
62'

24' Lanes
5' Bike Lanes
8' Parking & Gutter
10' Sidewalk
47'

Page 54, Paragraph 4 and Page 55

42

The discussion of unit equivalents needs adjustment. The idea of assigning a number to each service area should be reconsidered. The concept should be that the cumulative total of all added units upstream of a point on a line cannot exceed a fixed number. All of the units could be added in one service area. If a service area's units are exceeded, then all of the downstream service areas must be decreased. The unit equivalents must be accumulative for each service area.

It should also be recognized that what happens in the balance of the Bullard Plan Area must be considered. The Sewer Study assumes that all of the Bullard area develops to the Plan standards. It is possible that the available capacity could be used downstream of Blackstone, with nothing left for the Woodward area.

Page 61, Paragraph 4

43

Water meters shall be installed. The Public Works Department believes that well-head water treatment will be a "given" for the later stages of the Plan area. The possibility of landscape limitations for water conservation purposes should be mentioned.

Page 64, No. 7-3.6

- 44 [It will be necessary to use air stripping, carbon filtration, or other technologies for wells known to be experiencing contamination problems.

Page 64, No. 7-3.10

- 45 [Continue regular monitoring of all wells in accordance with state regulations.

Page 70, No. 8-1.2

- 46 [Utilize all available surface water entitlements for recharge or treatment purposes.

DEIR NO. 10100--WOODWARD PARK COMMUNITY PLAN UPDATE

Page 25, Paragraphs 2 and 3

- 47 [The current average annual City-wide water consumption rate is about 230 gallons per capita per day instead of 300 gpc/day. If you are discussing just the Woodward Park area, it is even higher than the 300 gpc/day.
- 48 [The City's consultant advised that we would achieve a combined flow of 4300 gpm from the two new wells. However, their actual yield is actually significantly lower: 1,700 gpm.

Page 25, Paragraph 3

- 49 [Our consultant's latest estimates for surface water treatment is \$50--\$100 million for both the treatment plant and piping from Friant.

[Additional mitigation measures should be added:

- 50 [
- Water meters as a tool for water rationing and water management.
 - Low flow facilities
 - Landscape restrictions
 - Surface treatment/recharge

Page 29, Paragraph 4

- 51 [The Wastewater Treatment Plant has now been rated at 54.5 rather than 60 mgd. The current usage is slightly under 50 mgd. This means that we will need to begin expansion in less than 10 years. We are currently anticipating expansion starting within 5 years.

Page 32, Paragraph 1

- 52 Neither alternative provides additional capacity for Clovis' growth.
- 53 The connection fee needed to support a bond financing program for the Herndon enhancements and the share of the Grantland main line is approximately \$700 per residential unit. (There is little difference in fees for either alternative).

Page 34, Paragraph 2

- 54 The San Joaquin River also keeps traffic from moving into and through the area from the north.
- 55 The statement about Herndon congestion delaying emergency vehicles has not been substantiated by the Public Works Department.

Page 36, Paragraph 3

- 56 The Northeast Growth Area Fiscal Impact Study assumed development of 10 units per acre.

Page 42, Paragraph 1

- 57 Future relief for Herndon Avenue can be achieved by a Copper Avenue/9 crossing the river and connecting with Highway 41.

In addition, I am attaching detailed comments from the Traffic Engineering Division.

Thank you for the opportunity to comment.

Memorandum

To : 1. Projects Coordinator
Resources Agency

Date : July 6, 1989

2. Mr. Ray Beach, Senior Planner
City of Fresno
Development Department
2326 Fresno Street
Fresno, CA 93721

From : Department of Fish and Game

Subject: SCH 88020817 - Woodward Park Community Plan Update
General Plan Amendment, Fresno County - Draft EIR

The Department of Fish and Game has reviewed the Woodward Park Community Plan Update-General Plan Amendment and Draft EIR. The Plan discusses development within an 8,290 acre area of north Fresno, adjacent to the San Joaquin River.

58 We believe that the Community Plan should include specific goals and policies that will guide the City of Fresno in the long-term allocation of funding, and development of land and facilities. Lacking such long-term policies, the commitment of funding and other resources will be insufficient to remedy water quality problems which already exist and are certain to increase in severity as the area is more intensively developed.

59 To eliminate further contamination of the San Joaquin River from toxic materials entering the stream via direct discharge, we recommend that all street drainage and other urban run-off be captured and pre-treated. On-site treatment and/or discharge to a treatment facility is recommended for all run-off and discharge from industrial sites. The run-off from predominantly residential areas may be effectively pre-treated in drainage/percolation basins. Direct discharge of non-treated run-off to natural streams would not be acceptable, pursuant to the Fish and Game Code, if it is found to contain any prohibited substances.

In addition, all urban discharge systems need to include the capability to shut off the flow to natural streams, and have sufficient holding capacity to accommodate any flood flows that may occur during accidental hazardous material spill events. In addition, drainage treatment facilities should include adequate containment features.

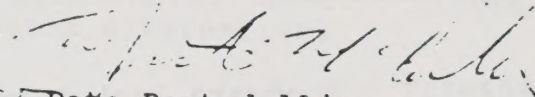
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JUL 7 1989
STAFF
CLEAR

1. Projects Coordinator
2. Mr. Ray Beach

-2-

July 6, 1989

Thank you for the opportunity to comment on the Community Plan Update. If you have questions regarding these comments please direct them to George D. Nokes, Regional Manager of Region 4, at 1234 East Shaw Avenue, Fresno CA 93710, or (209) 222-3761.


Pete Bontadelli
Director

DEPARTMENT OF TRANSPORTATION

4491 West Shaw Avenue
Fresno, CA 93722

JUL 13 1989

TDD (209) 488-4066

July 6, 1989

Fre-41-31
Woodward Park
Community Plan Update

Mr. Ray Beach, Senior Planner
General and Community Planning Section
Planning Division
Development Department
2326 Fresno Street
Fresno, CA 93721

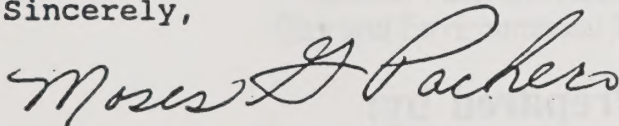
Dear Mr. Beach:

We have reviewed the application for the above referenced project and offer the following comments:

- 60 It appears inappropriate to terminate the expressway status of Friant Road and Willow Avenue at Audubon Drive and Alluvial Avenue respectively. For traffic circulation purposes, it appears the expressways should be extended all the way to Freeway 41 and Herndon Avenue. We also recommend
- 61 that highway access be spaced no closer than one mile. Anything less than one mile will significantly reduce the efficiency of the expressways.

Should you have any questions on this matter, don't hesitate to call Moses Pacheco at (209) 488-4128.

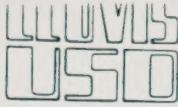
Sincerely,



for NATHAN M. SMITH
District 6 Transportation Planner

MGP:jag/cf

cc: DAM
MGP
H. Orav



TERRY BRADLEY

Associate Superintendent for Administration

CLOVIS UNIFIED SCHOOL DISTRICT
1450 Herndon Avenue • Clovis, CA 93612

Office (209) 297-4000 • Home 431-8021

Clovis Unified School District

**NORTH OF SHEPHERD AVENUE
ELEMENTARY SCHOOL SITES STUDY**

62

**Prepared for:
Clovis Unified School District**

**Prepared by:
Michael Paoli and Associates
Blair, Church and Flynn**

June 27, 1989

**NORTH OF SHEPHERD AVENUE
ELEMENTARY SCHOOL SITES STUDY**

62

Prepared for

Clovis Unified School District

Prepared by

Michael Paoli and Associates
City and Environmental Planners

and

Blair, Church and Flynn
Consulting Engineers

June 27, 1989

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PURPOSE AND BACKGROUND

The purpose of this study is to identify potential sites for four new elementary schools in the area north of Shepherd Avenue, within the *Woodward Park Community Plan* (WPCP) area. The specific area in which the sites are to be located is bounded by Copper Avenue on the north, Shepherd Avenue on the south, Willow Avenue on the east and Cedar Avenue on the west.

↑ The need for the identification of school sites in this area is prompted by the City of Fresno's current updating of its WPCP. As part of this process, the City is reevaluating the land use and circulation pattern for the entire WPCP area. It is important that the District participate in the updating process to ensure that the need for elementary school sites in the area is reflected in the WPCP, either on the plan map or through its policies.

62

↓ Previous studies had estimated that the District would ultimately need three additional elementary school sites north of Shepherd Avenue and east of Cedar Avenue. This was based upon a build out population of about 70,000. The Fresno City Council, however, recently initiated two versions of the plan update for consideration, one having a build out population of 64,000 (staff version - see Figure 1) and the other having a build out population of about 82,000 (committee version - see Figure 2). If the committee version is adopted, it is possible that five school sites would ultimately be needed. Because population build out projections are theoretically based and tend to be high, the locations for only four sites are considered in this study.

Two of the sites will be required regardless of what plan version is adopted. The remaining two sites would be contingency sites that would come into play depending on whether the committee version or something in between the committee and staff versions is adopted.

Figure 1

62

PRELIMINARY INTERIM WOODWARD PARK COMMUNITY PLAN

STAFF RECOMMENDATION

LEGEND

-  AG / URBAN RESERVE
-  RECREATION / OPEN SPACE
-  PARK / PONDING BASIN
-  QUASI - PUBLIC / PUBLIC FACILITY
- RESIDENTIAL**
 -  LOW DENSITY
 -  MEDIUM DENSITY
 -  MEDIUM HIGH DENSITY
- COMMERCIAL**
 -  OFFICE
 -  NEIGHBORHOOD
 -  COMMUNITY (CR - COMMERCIAL RECREATIONAL)
 -  GENERAL
 -  REGIONAL

PRELIMINARY
FOR ANALYSIS ONLY

PRELIMINARY

City of Fresno - Development Department - Planning Division

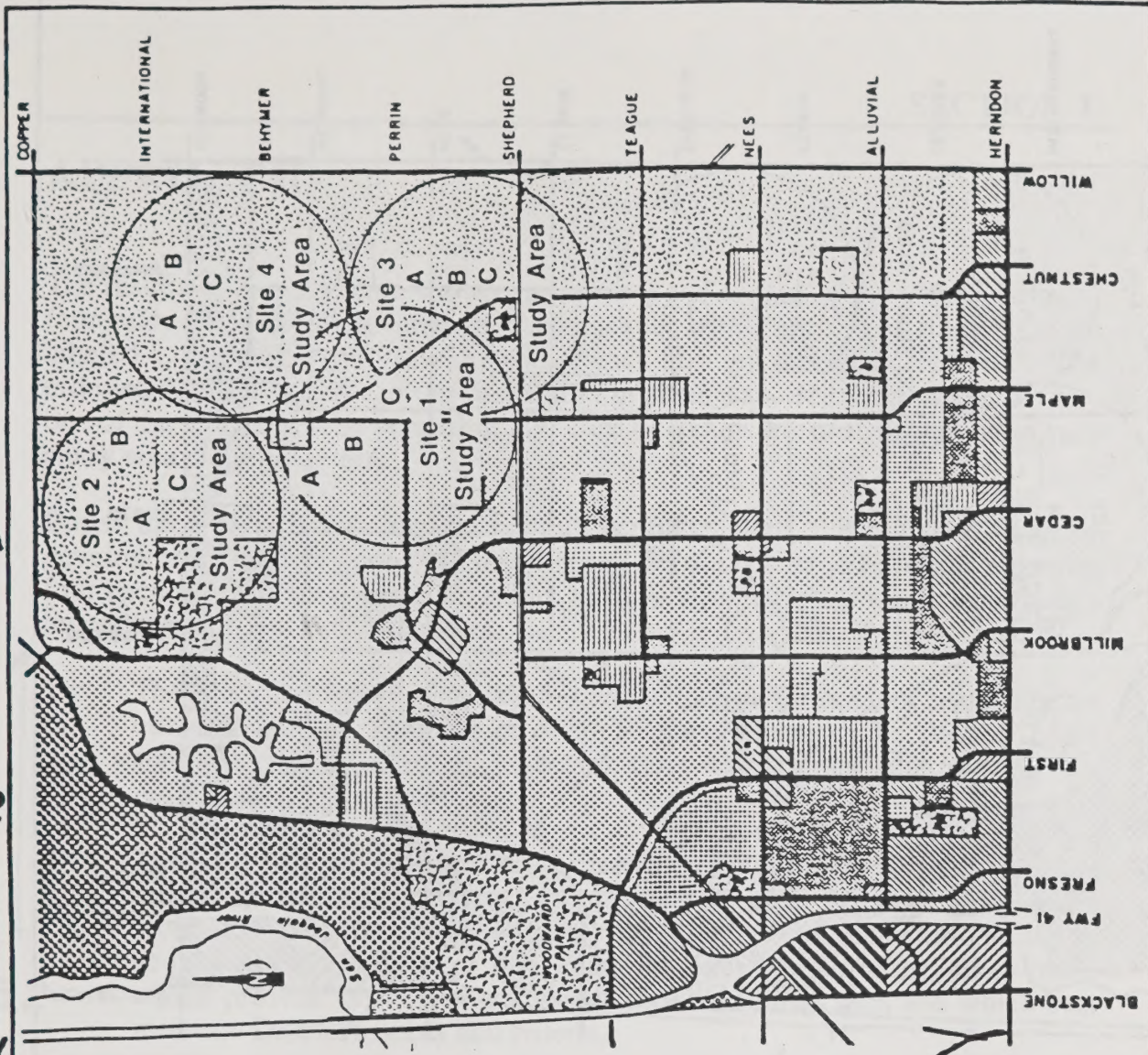
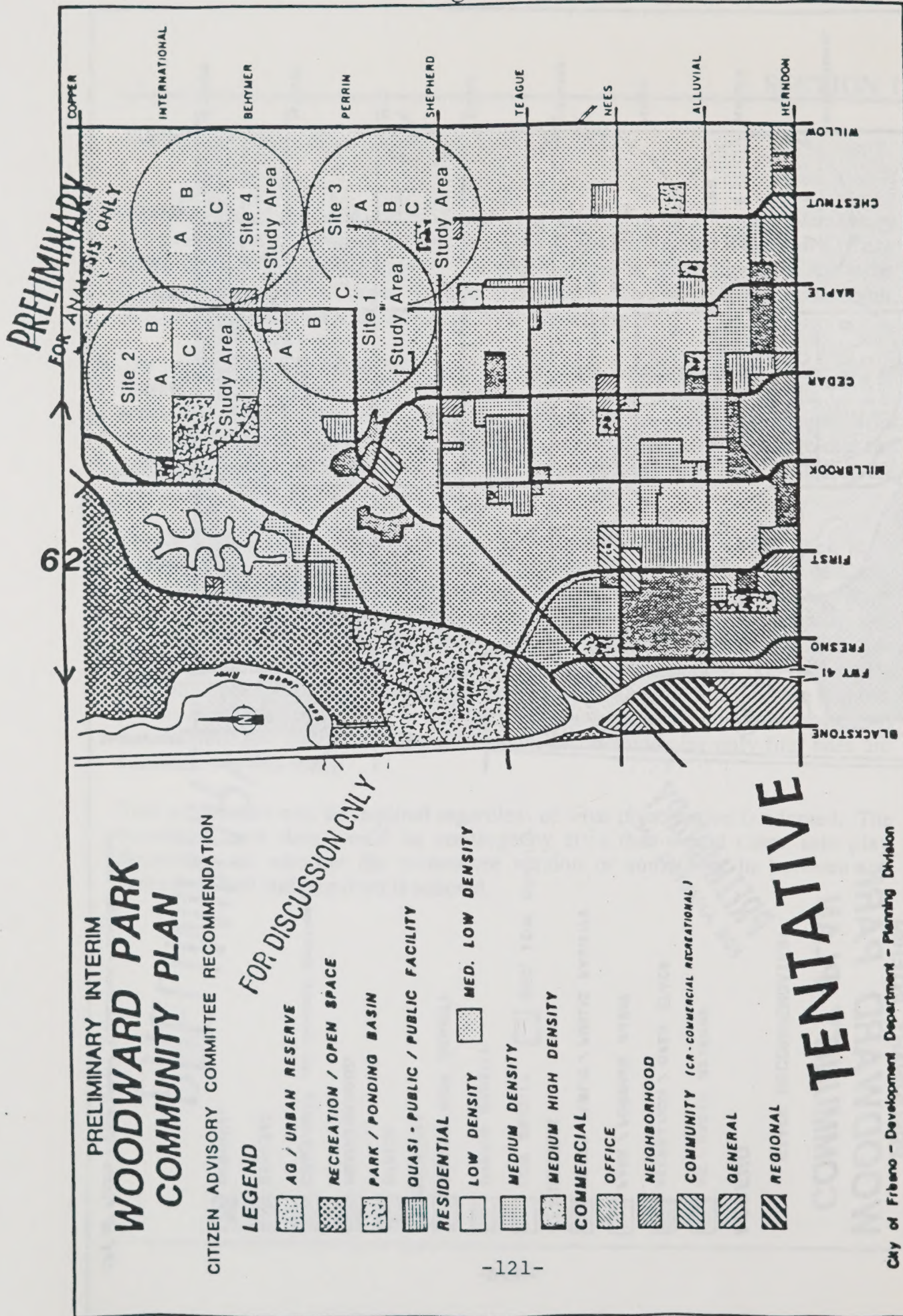


Figure 2



APPROACH

The results of this study are shown on Figure 3 and consist of the identification of four study areas and three alternative school sites within each. The study areas are labeled 1, 2, 3 and 4 and the sites within each area are labeled A, B and C. The order of the study areas and the sites does not signify an order of preference. Any one of the areas could be labeled Study Area 1 and any one of the sites within each study area could be Site A.

Based upon current information related to public plans and policies, status of development, and conditions and resources, it did not appear to be feasible to select four specific sites for future elementary schools at this time. Further information related to these factors is as follows:

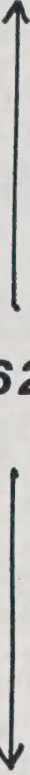
- 
- 62
1. The exact number of school sites which will be needed cannot be determined until it is known which version of the WPCP is adopted. The locations of the schools may differ if only two or three rather than four schools are required.
 2. The locations of the schools are interrelated. If all four of the sites are required, the location of all of the sites will probably depend upon the location of the first site acquired by the District. As each additional site is acquired, the locations of the remaining sites can be narrowed to those which provide the best relationships to the acquired sites and which best meet the District's needs and criteria.
 3. The order in which the acquisition of the sites will be required cannot be determined at this time.
 4. In some parts of the area, particularly the north and northwest, the major street system has not been completely determined (see Figure 4).
 5. An evaluation of specific sites, based upon the District's criteria (see Appendix A), would show little differentiation between sites at this time because most of the infrastructure is not in place anywhere in the area and the final land use designation for over half of the area has not been determined.
 6. Much of the land within the WPCP, north of Herndon Avenue, is held in very large parcels. It is highly conceivable that large projects similar to the Woodward Lake or Dominion projects could be developed. If this occurs, it is probable that the school site shown closest to the project area would be





Figure 3

Clovis Unified School District

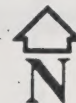
**WOODWARD PARK COMMUNITY
PLAN NORTH OF SHEPHERD
AVENUE AREA ELEMENTARY
SCHOOL SITES STUDY**

62

**Study Areas and Alternative Site
Locations**

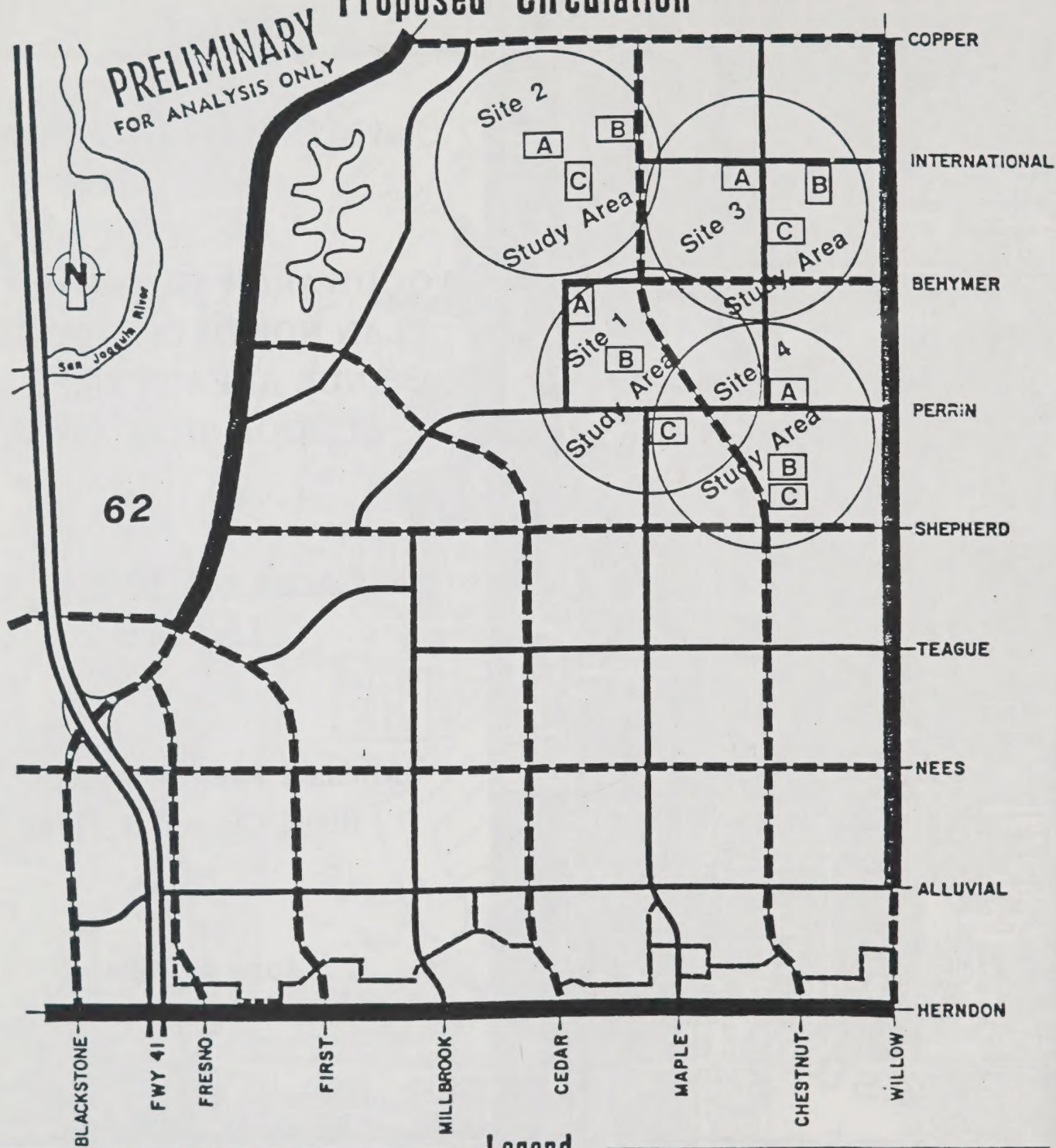
**Michael Paoli & Associates
Blair, Church & Flynn**

June 27, 1989



1" = 1500' ±

Woodward Park Community Planning Area Proposed Circulation



Legend

- Freeway
- Expressway
- Arterial

- Collector
- Herndon corridor
local street

shifted, if necessary, so that it is located within the project. If this should be one of the earliest sites acquired by the District, it would affect the locations of the remaining sites.

Because one of the most significant factors in locating elementary school sites is the need to provide enough separation between sites to permit the maximum number of students to walk to the school, the acquisition of the first site in the area north of Shepherd Avenue and east of Cedar Avenue will to some extent govern the location of the remaining school sites. The alternative school locations shown on Figure 3, take this factor into consideration. If, for instance, the first site selected for acquisition is labeled Site A, it is anticipated that the acquisition of Site A in each of the study areas would result in the best spatial relationships between sites throughout the area. If a Site B or a Site C site were selected, the Site B or Site C sites, respectively, in all of the study areas would provide the best spatial distribution of sites.

Because there are so many unknown and uncontrollable factors regarding the future development pattern of the subject area, it is not intended that the alternative sites be absolute. Rather, they are intended to provide a general concept of where schools need to be located and to assist in the future assessment of specific sites.

62 The exact sites which will be acquired will depend upon when, where and in what form development in the area north of Shepherd Avenue occurs. The first site acquired north of Shepherd Avenue by the District may be in any one of the study areas and may or may not correspond exactly with one of the sites shown on Figure 1.

This approach has been discussed with the planning staff of the City of Fresno and has been determined by them to be acceptable. The approach will not result in exact sites being shown on the WPCP, but will result in the incorporation of policies in the Plan which will reflect the need for schools in the area north of Shepherd Avenue in the study areas shown on Figure 1 and the need to locate these schools in a manner which will best meet the District's needs.

The basis for the selection of the four study areas and the three sites in each area is described in the following sections.

STUDY AREAS

The four study areas shown on Figure 3 were developed to indicate potential service areas for four elementary schools. Study Area 1 is located east and west of the Maple Avenue alignment, between Shepherd and Behymer Avenues. Study Area 2 is located almost entirely west of Maple Avenue, north of the Behymer Avenue alignment. Study Area 3 is bisected by Chestnut Avenue and extends from about one-fourth mile south of Herndon Avenue to about one-fourth mile south of Behymer Avenue. Study Area 4 is also bisected by Chestnut Avenue and extends from about one-half mile south of Behymer Avenue to about one-fourth mile north of International Avenue.

62 The study areas were situated, in so far as possible, to avoid the necessity for future attendance areas to cross Shepherd and Willow Avenues, both designated as major streets. They were also designed to permit a one mile separation between existing and future school sites. This arrangement was based upon the District's criterion of a one-half mile walking radius for K-3 students. The study area boundaries are idealistic, in that the service areas for the schools will not be perfect, one-half mile radius circles. The actual attendance areas will reflect the street pattern, density of development and the location of development in the vicinity of each school site.

It was not possible to locate all study areas in the described manner. The location of a site near the center of Study Area 1, as shown on Figure 3, would not result in a one mile separation from the existing Liberty School site. The Liberty School, however, is a skewed site in terms of its attendance area, in that it is designed to serve the Dominion project but is located near the northeast end of the project. When the Dominion project is fully developed, the Liberty School attendance area will primarily cover it and will not extend eastward one-half mile. Taking this factor in consideration, the location of Study Area 1 with its center only about one-half mile from Liberty School is appropriate.

Study Area 3 is shown as crossing Shepherd Avenue. It is expected, however, that the ultimate development pattern north of Shepherd Avenue will most likely result in the attendance area for the school being entirely north of Shepherd Avenue.

ALTERNATIVE SITES

1. Introduction

Three alternative sites are shown in each of the study areas. As previously noted, the A, B and C designations do not indicate an order of preference. The alternative sites shown on Figure 3 were identified through a process of elimination. Each study area was reviewed, utilizing, to the extent that was feasible, the District's criteria for the location of elementary school sites (see Appendix A). The City of Fresno's current plans and policies, and both the staff and committee versions of the *Woodward Park Community Plan* update which have been initiated by the Fresno City Council, and existing resources and conditions in the area north of Shepherd Avenue, were reviewed during the selection process. The alternative sites in each study area appear to be the most appropriate potential sites, based upon existing conditions.

62 The sites, however, to some extent, are generalized sites. Because this study is being conducted prior to the start of most development in the area north of Shepherd Avenue, many of the factors that determine where a specific site for an elementary school should be located are unknowns. (The only exception to this statement relates to Study Area 1. Because of existing and approved development near the northeast corner of Cedar and Shepherd Avenues, potential locations for school sites in Study Area 1 were pushed away from the center of the site to less centralized locations toward its north.) Depending upon the particular conditions which prevail in each study area at the time the District decides that it is appropriate to acquire a school site, it is possible that none of the sites, as they are shown on Figure 3, would be the best site for a particular school. It is expected, however, that the site would be in the near vicinity of one of these alternative sites.

The key factors which were taken into consideration in determining the location of the three alternative sites in each study area are described below. A review of Figure 3 will reveal that all of the sites do not meet all of the criteria. In some cases, the best potential sites in terms of known information were selected, even though one or more of the criteria were not met.

2. Study Area 1

The location of potential sites in Study Area 1 was limited by the factors described below. As can be seen from Figure 3, the Enterprise Canal crosses the northwest corner of Site C. Normally, a site crossed by a canal would be avoided. The site is included because it has an excellent location in terms of the District's other criteria and the canal could be piped.

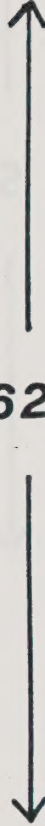
- 62
- a. The Liberty School is located slightly west of Cedar Avenue. In order to provide as much separation as possible from this school and still provide an appropriate relationship between all the sites which will be necessary to serve the area north of Shepherd Avenue, the site has to be located near Maple Avenue.
 - b. Existing and approved development for much of the southwest quadrant eliminates some potential school sites near the center of the study area.
 - c. The District's criteria include that an elementary school have access from at least two streets, at least one of which should be a collector street. The collector streets running through the area are Maple Avenue, a north-south street, and Behymer and Perrin Avenues, east-west streets. The site, therefore, should have access from at least one of these streets. The local street patterns in the area have not been determined. (Site B is located on a portion of the Maple Avenue alignment which is not designated as a collector street. The site was selected as an alternative because of its central location and because it appears that the street may be developed to collector street standards. The tentative tract map for the property immediately to its south, which is in the review process, is being required by the City of Fresno to design the west half of the street to collector street standards although it is not shown on the plan as a collector street adjacent to the site subdivision.)
 - d. Much of the southwestern portion of the area, south of the Perrin Avenue alignment is already committed to urban development projects (church and residential) and is not available for school use.
 - e. The Enterprise Canal traverses the area.
 - f. For the most efficient energy design, schools should be located on sites with an east-west orientation.

3. Study Area 2

Although three alternative sites in Study Area 2 are shown on Figure 3, for the reasons described in Items a and b, below, these are the most generalized sites shown in any of the study areas. Because of the topography, centralized sites in the study area were difficult to locate. As a result, Site B is skewed to the east of the study area and is located adjacent to an arterial street, which is inconsistent with District policy. As noted in Item b, below, the street system for the area has not been defined. Sites A and C have been situated on the half mile alignment, where collector streets would normally be located.

- a. Land is generally held in large parcels and future development patterns are not discernable. It is possible that some or much of the area may be

developed in planned unit developments (PUD) similar to Woodward Lake or in large projects such as the Dominion project. If this occurs, the most appropriate site might be within the PUD or project area.

- 
- 62
- b. The District's criteria call for elementary schools to be located on at least two streets, one of which should be a collector street. There are no collector streets designated in the area by the WPCP and the local street patterns will not be determined until development occurs in the area.
 - c. Land to the north, near Copper Avenue, and to the west, north of the Fort Washington County Club, has unsuitable topography for the location of a school.
 - d. The density of development for the northern portion of the area has not been determined.
 - e. In order to provide an appropriate separation between all the sites which will be necessary to serve the area north of Shepherd Avenue, the site has to be located near the Cedar and International Avenues alignments.
 - f. For the most efficient energy design, schools should be located on sites with an east-west orientation.

4. Study Area 3

The location of potential sites in Study Area 3 was limited by the following factors:

- a. The density of development for the eastern portion of the area has not been determined.
- b. In order to provide an appropriate separation between all the sites which will be necessary to serve the area north of Shepherd Avenue, the site has to be located near the Chestnut Avenue alignment, near the center of the study area.
- c. The District's criteria include that elementary schools should have access from at least two streets, one of which is designated as a collector street. Chestnut Avenue, which bisects the site, is designated as an arterial street for a short distance north of Shepherd Avenue and as a collector street north of Perrin Avenue. The portion of the street between these two areas is in the center of the study area and is a local street. The local street patterns in the area have not been determined. These factors complicated the selection of alternative locations for a school site and it was finally necessary to locate two of the alternative locations (Sites B and C) on that portion of the street which is a local street.

developed in planned unit developments (PUD) similar to Woodward Lake or in large projects such as the Dominion project. If this occurs, the most appropriate site might be within the PUD or project area.

- 
- b. The District's criteria call for elementary schools to be located on at least two streets, one of which should be a collector street. There are no collector streets designated in the area by the WPCP and the local street patterns will not be determined until development occurs in the area.
 - c. Land to the north, near Copper Avenue, and to the west, north of the Fort Washington County Club, has unsuitable topography for the location of a school.
 - d. The density of development for the northern portion of the area has not been determined.
 - e. In order to provide an appropriate separation between all the sites which will be necessary to serve the area north of Shepherd Avenue, the site has to be located near the Cedar and International Avenues alignments.

- 62** f. For the most efficient energy design, schools should be located on sites with an east-west orientation.

4. Study Area 3

The location of potential sites in Study Area 3 was limited by the following factors:

- a. The density of development for the eastern portion of the area has not been determined.
- b. In order to provide an appropriate separation between all the sites which will be necessary to serve the area north of Shepherd Avenue, the site has to be located near the Chestnut Avenue alignment, near the center of the study area.
- c. The District's criteria include that elementary schools should have access from at least two streets, one of which is designated as a collector street. Chestnut Avenue, which bisects the site, is designated as an arterial street for a short distance north of Shepherd Avenue and as a collector street north of Perrin Avenue. The portion of the street between these two areas is in the center of the study area and is a local street. The local street patterns in the area have not been determined. These factors complicated the selection of alternative locations for a school site and it was finally necessary to locate two of the alternative locations (Sites B and C) on that portion of the street which is a local street.

- d. For the most efficient energy design, schools should be located on sites with an east-west orientation.

5. Study Area 4

The location of potential sites in Study Area 4 was limited by the following factors:

- a. The Enterprise Canal traverses the area.
- b. In order to provide adequate separations between all the sites which will be necessary to serve the area north of Shepherd Avenue, the site has to be located near the Chestnut Avenue and International Avenue alignments.
- c. The density of development for the eastern half of the area has not been determined.
- d. The District's criteria include that elementary schools should have access from at least two streets, one of which is a collector street. Chestnut and Behymer Avenues, through the study area, are designated as collector streets. The local street patterns in the area have not been determined.
- e. For the most efficient energy design, schools should be located on sites with an east-west orientation.

SUMMARY AND CONCLUSIONS

62 ↑ The District has identified the need for two to four future elementary schools in the area located north of Shepherd Avenue and east of the Cedar Avenue alignment. The exact number of schools that will be needed will depend upon the density of development which will be permitted by the updated *Woodward Park Community Plan* which will be adopted by the City of Fresno later this year. Based upon information which is available at this time, particularly regarding the location, timing and form of future development and infrastructure, it was not possible to determine the exact locations of the school sites at this time.

↓ The four study areas and three alternative sites in each which were identified through this study can be utilized by the District to determine specific locations for the required schools as development moves northward into the area north of Shepherd Avenue and east of Cedar Avenue.

APPENDIX A

SITE SELECTION CRITERIA

Site Characteristics

This factor is concerned with the physical and locational features of the site.

Locational Requirements

The site should be located at least one-half mile from the nearest District boundary and one mile from the nearest existing or planned elementary school.

The site should be located in the middle of existing or proposed residential neighborhoods to allow the school to function as an activity center, to permit students to walk or bicycle to school, and to minimize the need for District-provided bus services.

Size and Shape

The site must have a minimum of 15 net acres. The ideal dimensions for a site are 695 x 940 feet.

Accessibility

The site should have access to at least two existing or planned streets that can accommodate the traffic generated by a school and surrounding development. It also should be located to minimize the number of students who will have to cross a major street to reach it. (A major street is defined as a collector, arterial or expressway.)

Ownership Pattern

The site should involve a minimum number of parcels and owners to facilitate land assembly. The ideal case would be to have the whole school campus as a single parcel.

Existing Development

The site should be minimally developed. The need to displace existing structures or residences will influence the acquisition cost of the site and adversely affect those who must be relocated.

Environmental Considerations

The site should have no significant environmental constraints such as flooding, exposure to excessive levels of noise or air pollution, or direct access to potential public safety threats such as open ditches or creeks.

Site Development

This planning factor is concerned with the ease of preparing the site for construction and the availability of utility services.

Landfill

It is preferable to select a site with little or moderate landfill requirements. Excessive landfill would increase the costs of developing the school facilities.

Irrigation Ditches

The site should have minimal lengths of irrigation ditches requiring piping.

Utility Service

- 62 It is preferable that the site have direct hookups to existing utility services such as sewer, water, drainage, and power. Demand for these services should be in accordance with the City's and other agencies existing or planned service capabilities.

Public Policy Consistency

This planning factor addresses how well the proposed site acquisition and development conforms to the current policies of affected governmental agencies.

✓ *City of Fresno General Plan and Woodward Park Community Plan*

The site should be in an area where urban residential development is planned and where the local planning agency can find the site consistent with its general and community plans.

Agricultural Preservation

The site should avoid as much as possible the loss of agriculturally productive lands. Williamson Act agricultural land contracts are intended to discourage premature urban development.

The site should not create a "leap frog" pattern of development; that is, it is preferable that it be located close to existing urban development.

Neighborhood Considerations

This planning factor considers how compatible the proposed site and use are with existing and future uses in the general vicinity.

Existing Uses

The future school site should be compatible with existing uses in the general neighborhood; that is, the surrounding uses should not impose significant adverse impacts on the school site such as excessive levels of noise, traffic, or air pollution. At the same time, the school should not adversely affect the existing uses. It is preferable for the site to be located away from multiple-family, commercial or industrial development.

Future Uses

The school site should be compatible with future uses. It should be located within a residential development area to serve a maximum number of students within the immediate area. As noted above, the site should be located away from multiple-family, commercial or industrial development.

Access

The school site should be centrally located within the neighborhood to promote pedestrian and bicycle use by the student population. The roadways around the school should be able to accommodate the traffic generated by the facility and surrounding uses and to provide safe, convenient access to the school.

WOODWARD PARK COMMUNITY PLAN FINAL EIR RESPONSE TO COMMENTS

Numbers in the left margin are coded to corresponding numbers added to the left-hand margins of public comment letters, as incorporated into the final Environmental Impact Report (EIR).

Response to the Native American Heritage Commission
letter dated June 19, 1989:

1. The Environmental Impact Report for the Woodward Park Community Plan recognizes the importance of prehistoric and historic remains by providing for the implementation of city, state and federal policies and requirements necessary to protect and preserve relics, artifacts and structures of importance as they become known.

Response to the Fresno Fire Department
letter dated June 23, 1989:

2. Because staff's alternative does not provide for urbanization of a majority of the area to be served by Station No. 21, and because area streets north of Behymer Avenue and east of Millbrook Avenue are subject to change as future development occurs, no permanent site for Station No. 21 has been designated on land use plans. However, prior to the approval of any development entitlement north of Behymer or east of the Cedar Avenue alignment prolonged, a specific site for Fire Station No. 21 shall be designated on adopted land use plans (Policy 7-5.8, page 63 of plan).
3. Policies within the Woodward Park Community Plan (Policy 7-3.1, 7-3.10 and 7-5.2) require that in all areas of construction and new development, adequate water supplies and appliances must be available. However, it should be noted that, given the limited quantities of potable groundwater resources available and the possibility of further groundwater contamination, it remains possible that periodic water pressure drops may occur thereby diminishing local firefighting capabilities.
4. Comment noted. Reference in the EIR to a ladder truck on page 79, second paragraph, has been deleted.
5. Comment noted. The draft circulation plan currently shows no major streets between Millbrook and Maple Avenues, and

Copper and Behymer Avenues. In the future, a system of local collector streets will be needed for this area. However, given the large parcel size, the presence of the Fort Washington Country Club and staff's reluctance to show urbanization for much of this area pending resolution of major water issues, it was decided that the planning of such a street system was premature. However, prior to the approval of any development north of International Avenue, between Millbrook and Maple Avenues, a comprehensive local street system shall be planned lined with direct links to Millbrook, Copper, Maple and International Avenues.

Response to Dennis J. O'Bryant, California Department of Conservation, letter dated June 27, 1989:

6. Comment noted. The loss of prime agricultural lands is a significant issue.
7. Comment noted. The correct figure is approximately 3,500 acres.
8. Within the Woodward Park area there are no areas of significant seismic activity. For an expanded discussion of the planning area's geology, please refer to the section on water quality and quantity in the plan, and to the section on water in the draft EIR.
9. Within the planning area boundaries, most of the remaining vacant land for which no development entitlement has been approved is designated as being either prime farmland or falls into the classification of state-wide important farmland.
10. Comment noted. Figure No. 7 has been modified accordingly.
11. The plan, as drafted, proposes no change in the City's Sphere of Influence and continues to note the loss of productive agricultural lands as a significant environmental impact. Accordingly, it is an existing policy of the City of Fresno, as adopted in the General Plan, to "continue to recognize its agricultural preserve contracts ...and promote the enrollment of all prime farmland within its domain that remains outside of its anticipated urban growth area."
12. This is not an environmental comment, but a procedural one that cannot be appropriately dealt with in this report.
13. Full development of the Woodward Park community could result in the conversion of up to 3,500 acres of potential

farmland to urban use over an approximate 20-year period. This is a significant impact.

14. Comment noted.
15. Within the Woodward Park community, potential areas of erosion are limited to the San Joaquin bluffs and river-bottom. No additional urban development is anticipated in these planned open space areas.
16. The City of Fresno is reorganizing its development functions to create an environmental review section that will be responsible for monitoring mitigation measures.
17. There are existing City plans and policies to protect agricultural land uses within the urban boundary line. These policies were adopted as part of the 1984 Fresno General Plan.

The General Plan states, "Prime farmland shall be preserved for continued agricultural use to the fullest extent feasible consistent with the protection of the environment, public safety and well-being, and the planned, orderly and efficient development of the urban area."

Existing City plans and policies in the General and Community Plans are sufficient to allow agriculture in the urbanizing area.

18. This is not true; the staff alternative proposes the creation of a substantial urban reserve area that reflects much of the project area's productive agricultural lands. Otherwise, comment noted.

Response to James N. Walton
letter dated June 27, 1989:

19. Policy 1-4.3(g) proposes to allow the location of day care centers outside of office designated areas on sites which have direct access to a major street and are specifically limited to child day care center use.

Response to Emory Wishon
letter dated June 27, 1989:

20. Comments noted and accepted. The multipurpose trail should be extended southward along the east side of Fresno Street.

Response to the Woodward Park Homeowners Association letter dated July 3, 1989:

- 21. Comment noted.
- 22. Comment noted.
- 23. Comment noted.

Response to Leslie Kline, Fresno County Public Works and Development Services Department letter dated June 30, 1989:

- 24. The traffic analysis for the Woodward Park Community Plan covered the entire planning area irrespective of its annexation status. As provided in the Joint Planning Resolution adopted by both the City and County of Fresno, the City has completed a comprehensive land use and circulation plan for the area. This plan will be referred to the County for immediate adoption after City Council consideration.
- 25. City land use plans have never shown a transfer station within the Woodward Park community. This plan proposes no change in that status.
- 26. This does not appear to be an environmental response.
- 27. Comment noted. The decision to designate Friant Road as an arterial or super-arterial predates this planning process as well as the 1984 General Plan update. However, this roadway should be designated as a scenic highway. Accordingly, it is proposed that policy 3-4.11 be added to the plan.

Response to Leon Lancaster, City of Clovis Public Works Department, letter dated July 5, 1989:

- 28. Comment noted. The expressway designation will be extended to Herndon Avenue.
- 29. Adopted City street standards do not provide the specific controls on access that are apparent with an expressway designation. It is prudent to err on the conservative side along Willow Avenue given its status as (1) the longest continuous north/south street in the metropolitan area; (2) the street constitutes a border between two communities and will, therefore, be subject to two sets of development standards; and, (3) the street will serve as a direct linkage between Freeway 168 (when constructed) and any potential metropolitan-wide east/west street constructed north of the planning area.

30. Prior to submittal of any changes in the status of Willow Avenue to any regional transportation body, the City must first determine whether or not it intends to pursue such a change. That decision will be made as part of the adoption process for the Woodward Park Community Plan.

Response to Marvin Johnson, City of Fresno
Public Works Department, memorandum dated July 5, 1989:

31. Comment noted. The phrase "and previous land use decisions" will be added in the sixth line after the word river (page 40 of plan).
32. Council direction, during the initiation of staff efforts to update the Woodward Park Plan, was to match existing public facility service capacities to planned land uses in order to minimize the need for new expensive facilities that would, in all probability, be growth-inducing in an area of continuing groundwater concern.
33. Comment noted.
34. This plan focuses only on the Woodward Park area, proposes no new public facilities, and points to a policy of managed growth in the planning area. Any discussion relating to the City of Clovis's future needs is beyond the scope of this project.
35. Comment noted.
36. Comment noted.
37. Comment noted.
38. Comment noted. See response to comment No. 5.
39. Comment noted. Parking should be prohibited on all major streets within the planning area.
40. Comment noted.
41. Comment noted.
42. Comment noted. It is perhaps appropriate to establish these modified unit equivalents at the time fees are fixed for sewer services for new development within the planning area.
43. Comment noted. However, any discussion to limit landscaping within the City of Fresno must occur on a

City-wide basis and cannot appropriately be addressed in this community plan update.

44. Comment noted.
45. Comment noted.
46. Comment noted. However, this update neither proposes the use of surface water treatment for domestic purposes or has analyzed it.
47. Comment noted. However, the metering of individual units within the planning area gives a range of daily usage that is somewhat lower. Again, given the amount of median island landscaping and public facilities, as well as the preponderance of bluegrass landscaping, water use will be higher in this area on a per capita basis.
48. Comment noted.
49. Comment noted.
50. While these mitigation measures may be appropriate, they must be addressed, analyzed and adopted on a metropolitan-wide scale, not within individual communities.
51. Comment noted. The EIR will be modified.
52. The subject of Clovis's growth is beyond the scope of this project.
53. Comment noted.
54. Comment noted.
55. This comment was made public by administrators with the St. Agnes Medical Center.
56. Comment noted.
57. Traffic analysis of the role of Copper Avenue as a relief to Herndon Avenue was completed by the Fresno County Council of Governments. That analysis indicated that Copper Avenue would not substantially relieve congestion along Herndon Avenue and that any major street constructed in the Copper Avenue alignment would be underutilized given existing metropolitan land use patterns.

Response to Pete Bontadelli, State of California
Resources Agency, letter dated July 6, 1989:

58. Comment noted.

59. The City of Fresno is not the responsible agency which designs the metropolitan area storm drain system. The Fresno Metropolitan Flood Control District has the sole responsibility to monitor urban runoff, design appropriate systems and prevent contamination of the area's waterways. The District has initiated a system of urban runoff monitoring as a precondition of development of outflows to the San Joaquin River. Comments made by the Department of Fish and Game are prudent and will be referred to the Flood Control District for consideration.

Response to Nathan Smith, Department of Transportation,
letter dated July 6, 1989:

60. Staff is proposing no change in the current planned status of Friant Road, a status which is the direct result of extensive environmental review. Willow Avenue will be shown as an expressway to Herndon Avenue.
61. The mile spacing referral is for rural areas. The half-mile spacing used by the City of Fresno exists on all expressways in the City and represents the existing street network within the Woodward Park community.

Response to the Michael Paoli and Associates
study prepared for the Clovis Unified
School District in response to the
Draft Woodward Park Community Plan and EIR:

62. Staff has reviewed this study and concurs in its recommendations. Accordingly, Policy 7-7.3 is amended to add the following wording:

"Staff shall continue to work with the Clovis Unified School District to locate needed school sites within the area north of Shepherd and east of Cedar Avenue. Figure indicates potential school sites, as identified by the Clovis Unified School District. Upon determination of an exact location for each of the sites, the District will be required to process a plan amendment through the City of Fresno.

DRAFT ENVIRONMENTAL IMPACT REPORT
WOODWARD PARK COMMUNITY PLAN

INTRODUCTION AND PROJECT DESCRIPTION

AUTHORITY AND PURPOSE

This Environmental Impact Report (EIR) examines the anticipated environmental consequences of adopting and implementing the Interim Woodward Park Community Plan Update. It is intended to fulfill the City of Fresno's obligation under the California Environmental Quality Act (CEQA) of 1970, and its implementing guidelines (State CEQA Guidelines) which apply to local governments when a decision is made to approve or carry out a project. The plan update is a project which could result in potentially significant adverse environmental impacts upon its implementation through private and public actions to develop properties and construct public facilities.

The environmental characteristics and physical conditions of this community are primary issues confronting its continued growth and well-being. These issues include limited sewer capacity, uncertain groundwater conditions, traffic congestion, school overcrowding, population density, extraordinary amounts of designated commercial and office uses, public safety, open space, and air quality. This EIR has been incorporated into the plan document in order to promote public understanding and discussion of the implications of the plan's objectives and strategies regarding these issues.

The conclusions and recommendations of the EIR must be considered by the City of Fresno prior to its adoption of the community plan. Significant environmental effects must be eliminated, substantially reduced or determined to be infeasible to mitigate due to overriding economic, social or other considerations. Approval and certification of the EIR provides a public record of the environmental consequences of pursuing the proposed plan and the obligations of the City or other responsible public agencies to minimize them where possible.

PROJECT DESCRIPTION

The Woodward Park Community Plan Update revises comprehensive plans and policies for the 8,290 acre area bounded by North Blackstone Avenue on the west, the San Joaquin River and East Copper Avenue on the north, North Willow Avenue on the east, and East Herndon Avenue on the south. This plan update consists of statements, illustrations, goals, and policies/implementation measures which refine and make more precise the broad goals and policies of the 1984 Fresno General Plan.

The level of detail and precision characterizing the plan policies and diagrams are consistent with specific plan requirements, as set forth by California State Planning Law (Government Code Sections

65450-65456). The plan specifies the extent and location of a range of urban and open space uses with supporting major street circulation systems which are appropriate for the area. Criteria and standards for land development, allocation of supporting public facilities, and conservation and utilization of resources are also provided. Implementation measures are identified including regulations, public facility management programs, and financing measures.

A description of the plan's function and purpose, the factors and events contributing to current growth, and the significant issues jeopardizing the community's ability to sustain a healthy and desirable environment is provided by the plan's introduction (pages 1-14). This section summarizes the purpose and focus of the plan within the five-year planning horizon established by the Fresno City Council. Included within the introduction is the plan concept establishing the major assumptions and priorities upon which its goals and strategies are based.

Goals and policies/implementation measures are organized into eight major categories: land use, open space and conservation, circulation, transit, housing, physical growth and change, public facilities, and environmental concerns. These statements, with accompanying plan maps, establish the guiding principles by which the City of Fresno will determine the appropriateness of future proposals for land development and the provision of public facilities and improvements.

PROBLEM STATEMENT

Preparation of the Woodward Park Community Plan Update was authorized by the City Council in response to the problems, issues, and opportunities presented by the vigorous urban development activity occurring within the community. Over the past 40 years, comprehensive plans and policies of the City of Fresno have identified this community as an urban reserve area or a low-intensity suburban fringe community. Intensive urban activity was to be directed to more centrally located communities to maximize public service efficiencies and promote compatible land use relationships. However, this ideal has never been fully realized and the historical trend of intensified urban fringe development has continued to occur.

Since adoption of the 1974 Fresno-Clovis Metropolitan Area General Plan and the 1976 Woodward Park Community Plan, numerous incremental changes in the extent and intensity of planned urbanization have occurred within the Woodward Park community. Adoption of the 1984 Fresno General Plan established a comprehensive modification of this community's traditional plan concept. Rather than a residential transition community of 25,000 people with ancillary commercial and office uses, it was projected to be an urban community of potentially 130,000 people with regional commercial, office and service facilities.

The plan update identifies the issues and objectives which have motivated preparation of this plan. Seven major issues identified are uncertain groundwater resources, insufficient sewer trunk capacity, inadequate vehicular circulation systems, increased congestion, inaccurate residential density projections, overcrowded schools and, finally, the excessive amounts and improper locations of planned office and commercial uses.

The rapid pace of residential development and the extraordinary amount of area designated for commercial and office use presents significant land use compatibility, public service, and community stability issues. While recent development trends have provided a desirable living environment, this condition is jeopardized by potential land use conflicts, excessive and unbalanced urban development, and lack of cohesive planning policies and strategies.

OBJECTIVES

The major objectives of the Woodward Park Community Plan Update, as identified by the plan concept, are: (1) to provide an interim five-year growth plan which does not exceed available sewer and water service capacities of current systems; (2) provide for balanced growth consistent with the General Plan; (3) respond to public facility, resource, and land use issues; (4) establish and preserve the functional relationship of regional facilities; and, (5) protect and preserve the San Joaquin Riverbottom environment. These objectives focus the plan on maximizing the prudent management of natural resources, public facilities, and community assets in a manner which promotes the long-term enjoyment and viability of the community. Supporting goals and policies/implementation measures formulate a comprehensive strategy to achieve these objectives and minimize the adverse environmental consequences of urban growth.

ADVISORY COMMITTEE ALTERNATIVES AND REQUESTED PLAN MODIFICATIONS

On April 4, 1989, the Fresno City Council initiated the Draft Woodward Park Community Plan Update, as prepared by the Fresno City Development Department, and the alternative recommendations of the Plan Update Advisory Committee. In addition, 23 modifications for particular land use designations requested by property owners or their representatives were initiated for consideration. Although the plan concept, major street circulation system, and general land use patterns could remain the same or similar, approval of the alternative Committee recommendations or modification requests would establish a considerably different strategy with respect to urban growth, the provision of public facilities, and the distribution of intensive urban development.

The Woodward Park Community Plan Update Citizens Advisory Committee has recommended that the urban reserve designation and related

corresponding policies/implementation strategies not be utilized to manage urban development on the plan periphery. As an alternative, medium-low density residential uses would be designated as the prevailing use, extending out to the northern and eastern plan boundaries. Corresponding policies/implementation measures within the land use, urban growth and development, and public facilities segments of the plan (which provide for a more explicit allocation of resources to planned urban areas) would be deleted.

Deletion of these policies for urban growth and public facilities would allow urban development and the commitment of public facilities to occur in accordance with the existing or updated property development standards and Urban Growth Management program. Decisions to allocate limited public facility and resource capacities would continue to be made based upon the chronological order of development rather than its location. This strategy would rely upon the occurrence of competitive advantages of reduced development costs to induce contiguous urban development and the efficient extension of public improvements.

In addition to designating medium-low density residential uses on the plan periphery, alternative land use designations for two specific sites were recommended by the Advisory Committee. An environmental analysis of the Committee's two alternative recommendations and 17 of the proposed modifications, for which plan modification fees were subsequently filed, are included in this environmental document. Further consideration cannot be given to the six remaining modifications in accordance with the Local Planning Ordinance unless they are subjected to subsequent environmental analysis. These alternative recommendations and requested modifications generally proposed plan designations for more intensive urban development than provided for by the Development Department's recommended plan update. With these changes, an additional 86 acres of office use, 64 acres of commercial use, 50.5 acres of medium-high density residential use, 30 acres of medium density residential use, and five acres of medium-low density residential use would replace primarily medium and medium-low density residential-designated uses. Descriptions of the 17 modifications and two alternative designations are provided below.

FIGURE EIR-1 Woodward Park Community Planning Area

PROPOSED PLAN MODIFICATIONS

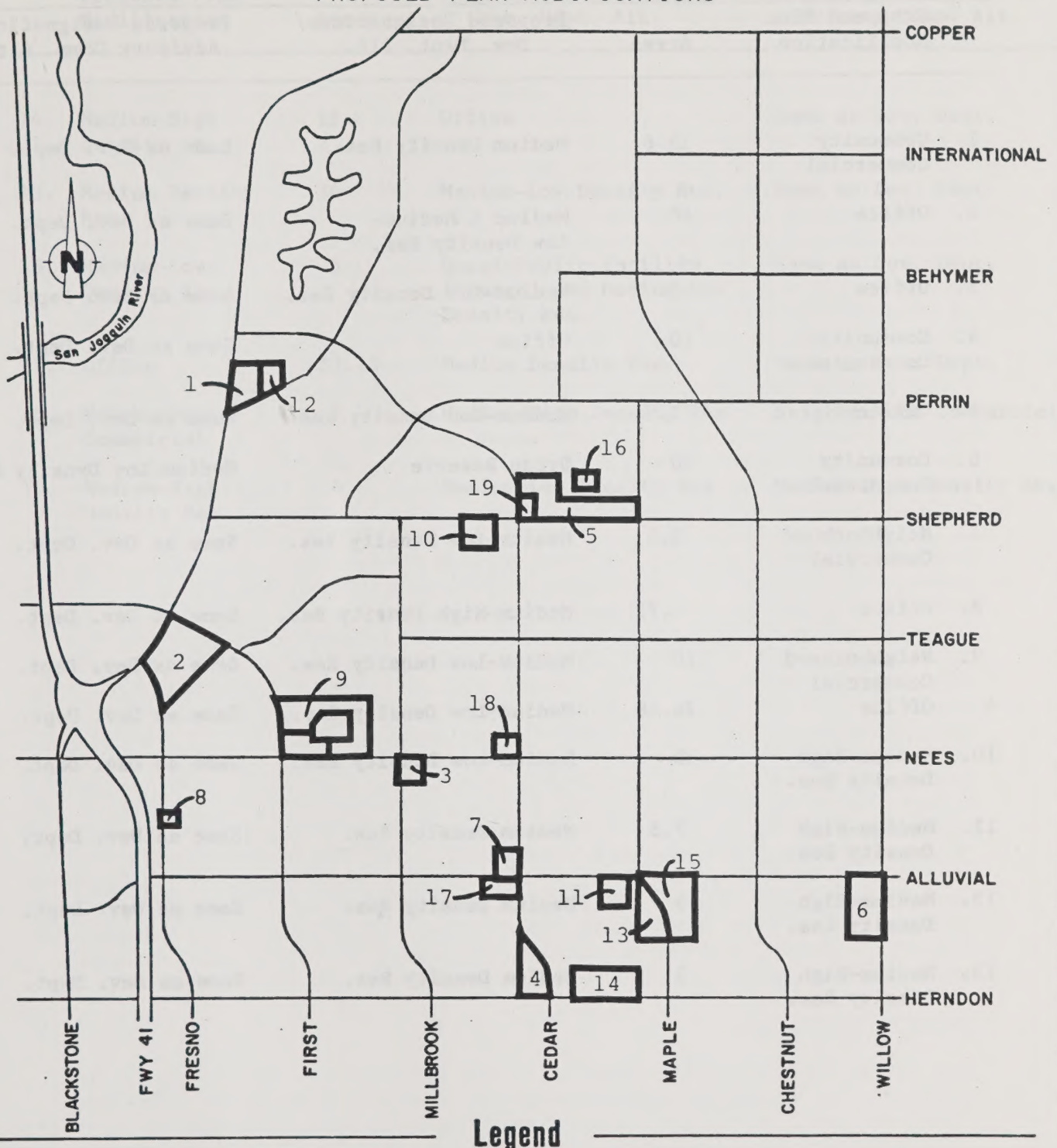


TABLE EIR-1

Proposed Plan Modification	Acres	Proposed Designations/ Dev. Dept. Alt.	Proposed Designations/ Advisory Comm. Alt.
1. Community Commercial	15.6	Medium Density Res.	Same as Dev. Dept.
2. Office	40	Medium & Medium- Low Density Res.	Same as Dev. Dept.
3. Office	3	Medium-Low Density Res.	Same as Dev. Dept.
4. Community Commercial	10	Office	Same as Dev. Dept.
5. Office	2.5	Medium-Low Density Res.	Same as Dev. Dept.
6. Community Commercial	20	Urban Reserve	Medium-Low Density Res.
7. Neighborhood Commercial	2.5	Medium-Low Density Res.	Same as Dev. Dept.
8. Office	.72	Medium-High Density Res.	Same as Dev. Dept.
9. Neighborhood Commercial	10	Medium-Low Density Res.	Same as Dev. Dept.
4 Office	26.68	Medium-Low Density Res.	Same as Dev. Dept.
10. Medium-High Density Res.	10	Medium-Low Density Res.	Same as Dev. Dept.
11. Medium-High Density Res.	7.5	Medium Density Res.	Same as Dev. Dept.
12. Medium-High Density Res.	6	Medium Density Res.	Same as Dev. Dept.
13. Medium-High Density Res.	8	Medium Density Res.	Same as Dev. Dept.

TABLE EIR-1

Proposed Plan Modification	Acres	Proposed Designations/ Dev. Dept. Alt.	Proposed Designations/ Advisory Comm. Alt.
14. Medium-High Density Res.	15	Office	Same as Dev. Dept.
15. Medium Density Res.	30	Medium-Low Density Res.	Same as Dev. Dept.
16. Medium-Low Density Res.	5	Quasi-Public Facility (Church) and Medium-Low Density Res.	Same as Dev. Dept.
17. Office	23.18	Medium Density Res.	Same as Dev. Dept.
18. Neighborhood Commercial	6	Medium-High Density Res.	Neighborhood Commercial
19. Medium-High Density Res.	4	Medium-Low Density Res.	Medium-High Density Res.

ENVIRONMENTAL SETTING AND SUMMARY OF IMPACTS

GENERAL

The Woodward Park Community Plan area contains approximately 8,290 acres bounded by North Blackstone Avenue and the San Joaquin River on the west, East Copper Avenue on the north, North Willow Avenue on the east, and East Herndon Avenue on the south. It is located on the northeast fringe of the City of Fresno's planned urban area and comprises approximately nine percent of Fresno's 146 square mile urban boundary/Sphere of Influence area. Approximately two-thirds of the plan area has been annexed to the City of Fresno, while one-third remains unincorporated and under the jurisdiction of Fresno County. In accordance with the Joint Resolution on Metropolitan Planning, the City of Fresno has primary responsibility for land use planning, urban development, and the provision of urban services within the designated Woodward Park Community Plan boundary. Other jurisdictions having land use planning responsibility and development authority which influence the Woodward Park community include Fresno County to the north and northeast, Madera County to the northwest, and the City of Clovis to the east.

Descriptions of the Fresno metropolitan area and Woodward Park Community Plan area environmental setting have been presented in several environmental impact reports, including the 1984 Fresno General Plan EIR No. 10085 (pages 8-21), incorporated herein by reference. The community plan area's topography is essentially flat, with the Friant-Kern Canal, which generally identifies the beginning of the Sierra-Nevada mountain range foothills, located approximately 3-1/2 miles to the northeast. A slight southwestward slope prevails with moderately rolling terrain in the north and the San Joaquin Riverbottom along the northwest. Freeway 41 along the west and Herndon Avenue along the south are highly significant transportation corridors. Central Fresno, as defined by the alignments of Freeways 99, 41 and 180, is six miles to the south. With the exception of the riverbottom and bluff-top environs, there are no readily apparent sensitive or constraining ecological or geological features. However, the community's physical characteristics and geographical relationship to the metropolitan area present unique problems and limitations.

PRESENT LAND USE

Low intensity urbanization has been considered appropriate for much of the Woodward Park community since adoption of the 1958 General Plan, although significant development did not occur until 1978. While the community has experienced substantial development over the past 10 years, a majority of the plan area remains vacant or in nonurban use. In 1988, approximately 2,470 acres

(30 percent of the plan area) were considered developed. Permanent open space or recreational areas account for approximately 800 acres or 9.7 percent of the plan area. The remaining 5,020 acres (60 percent of the plan area) are presently vacant or being used for agricultural purposes.

Significant residential development began in 1977 with the recordation of several tract maps, including the Woodward Park Estates development. Although residential development was sporadic through the early 1980's, an average of almost 400 dwelling units per year have been developed since 1979, including a single year high of 800 units. By October 1988, the community contained 7,348 dwelling units, of which almost 41 percent were multiple-family residences.

An enormous increase in the amount of land designated for office and commercial development has occurred since the adoption of the 1974 General Plan and 1976 Woodward Park Community Plan. Since that time, the total area designated for office and commercial use has expanded from 270 acres to 688 acres. As of October 1988, however, only a very small portion of this area (61 acres of commercial and 64 acres of office) has been developed. In contrast, industrial uses have never been planned for this community, with less than one percent of the area presently used for this purpose. Current industrial uses are primarily agricultural-related activities, sand and gravel extraction, and a waste transfer station (construction materials and yard waste only).

Approximately 11 percent of the planning area is riverbottom, recreational or other committed open space. The San Joaquin riverbottom environs, bluff-top area, and Woodward Regional Park represent resources which are regionally significant. The regional park provides extensive public access to the river bluff area. It also includes a strip of land between the bluff and river which may provide future access directly to the river. A San Joaquin River Parkway Plan is presently being prepared by the San Joaquin River Parkway and Conservation Trust. This plan will contain resource conservation and enhancement strategies, recreation/education access and development proposals, and a land use/management plan. Upon completion, the plan will be presented to appropriate public agencies for consideration.

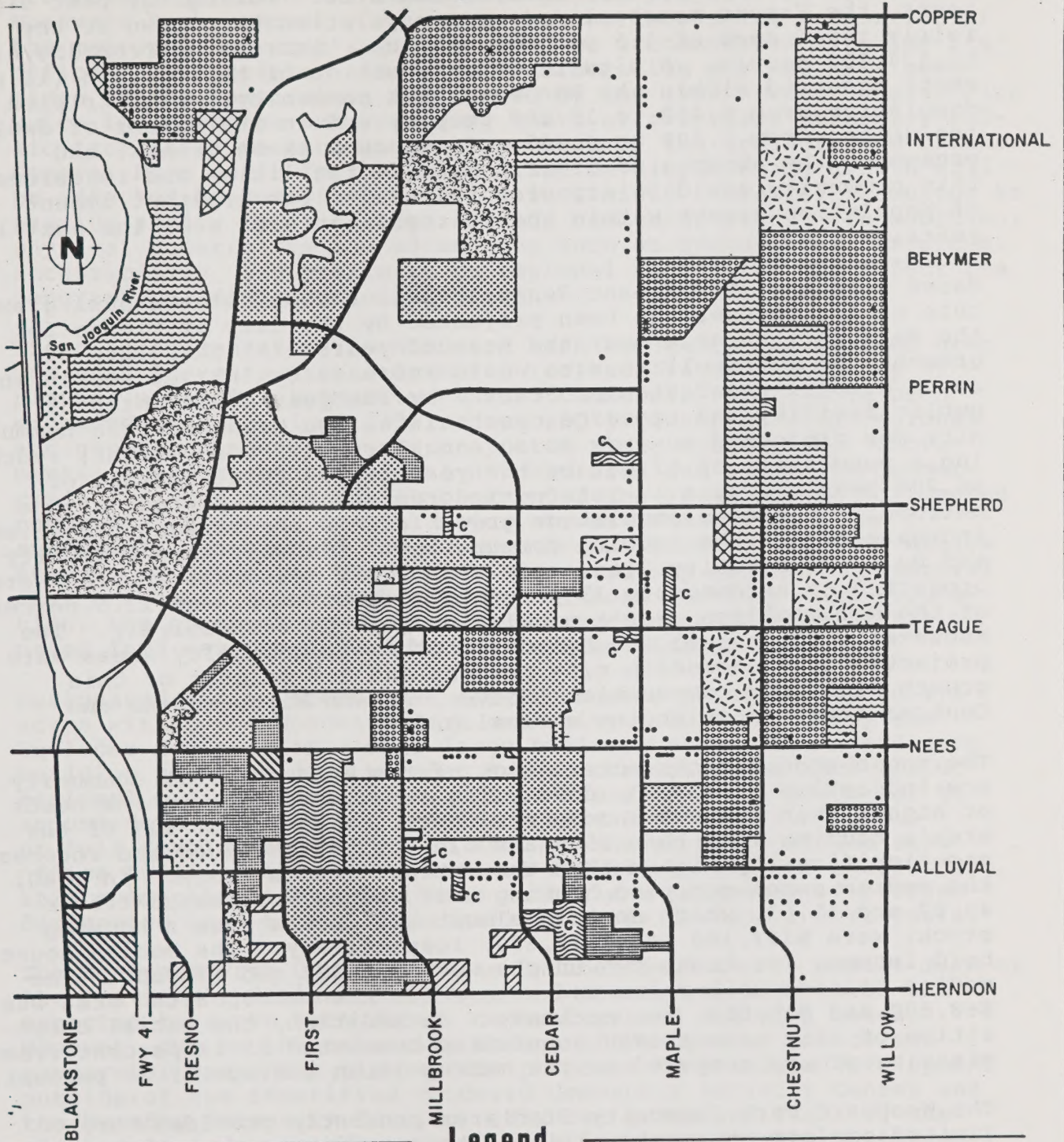
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TABLE EIR-2

EXISTING LAND USES (September, 1988)

<u>LAND USE</u>	<u>ACRES</u>	<u>NO. RESIDENTIAL UNITS</u>
Single Family	1,252	3,850
Multiple Family	197	3,023
Mobile Home Park	69	475
Public Facilities	143	
Office Commercial	61	
Retail Commercial	64	
Industrial	60	
Recreational	484	
Orchard	934	
Vineyard/Pasture/Row Crops	951	
Church	49	
Vacant	3,622	
River & Rights-of-Way	404	
	8,290	7,348 Units

FIGURE EIR-2 Woodward Park Community Planning Area Existing Land Use



Legend

- | | | | |
|-----------------------------|---------------------------|-------------------|-----------------|
| Vacant | Vineyard, Row Crops | Mobile Home Park | Recreational |
| House | Pasture | Office Commercial | Public Facility |
| Orchard | Single Family Residential | Retail Commercial | Church |
| Multiple Family Residential | Industrial | | |

8-88

CITY OF FRESNO - DEVELOPMENT DEPARTMENT - PLANNING DIVISION

SOCIO-ECONOMIC CONDITIONS AND POPULATION GROWTH

The Woodward Park community is presently a rapidly developing suburban fringe area which has been projected to continue growing at a faster pace than the metropolitan area. During the past eight years, the Fresno metropolitan area population has grown at the fairly rapid pace of 1.5 percent per year, increasing from 358,825 to 424,200 people. A significant proportion of this growth (16 percent) occurred within the Woodward Park community, which tripled in population from 5,450 to 16,200 people; and in the number of dwelling units, from 2,300 to 6,485. Based upon these trends, and presuming the absence of limiting public facilities and resources, this community could be expected to receive the greatest amount of population growth within the metropolitan area over the next 17 years.

Based upon the 1984 Fresno General Plan, a continuing annual growth rate of 1.4 percent has been projected by the City of Fresno for the metropolitan area over the next 17 years. At this rate of growth, the metropolitan area would increase by 163,900 people and reach a total population of 588,100 by the year 2005. Without public facility and resource constraints, the Woodward Park community was projected to grow at an annual rate of 8.5 percent, reaching a population of 62,400 by the year 2005. This increase of 46,200 people over a 17-year period represents 28 percent of the metropolitan area's population growth and is the largest projected increase of all the growing communities. The West Area Community and Bullard Community Plan areas and Clovis metropolitan area were projected to accommodate 23 percent, 17.8 percent, and 12.5 percent of the metropolitan area's population growth, respectively. The Roosevelt (southeast) and Edison (southwest) community areas were projected to accommodate nine percent and 4.4 percent of this growth with four communities (Hoover, Fresno High, McLane and Central Area) experiencing nominal growth.

The socio-economic characteristics of the Woodward Park community are indicative of a newly developing area responding to the needs of higher than average income residents. With almost all of the area's housing less than 15 years old, property values and incomes are significantly higher than the metropolitan average. In 1980, the median owner-occupied housing unit values for census tracts 44.02 and 55.01, which contain almost all of the area's housing stock, were \$107,100 and \$119,600, respectively. The median household incomes for these two tracts were \$24,322 and \$18,580. The median housing unit value and income for the metropolitan area was \$68,800 and \$15,858, respectively. In addition, the racial composition of this area's 1980 population consisted of 14 percent from minority groups compared to the metropolitan average of 33 percent.

The Woodward Park Community Plan area presently provides very limited employment opportunities with significant growth projected in employment by the year 2005. In 1986, it was estimated that 1,760 people were employed within the community, which was 1.1 percent of the metropolitan area's employment. Based upon projected metropolitan area employment growth and the extensive amount of

planned office and commercial land within the community, the projected employment for the year 2005 within the community could reach 20,930 or 8.9 percent of the metropolitan area's employment.

Previous population and employment growth projections for the Woodward Park community presumed that an increasing proportion of the metropolitan area's growth would be accommodated with few significant constraints. Adequate consideration may not have been given to the constraints identified by the 1984 Fresno General Plan which included the extraordinary costs of providing necessary public facilities to accommodate expansion of the urban fringe areas. General Plan goals for balanced urban development and growth will be affected by decisions to allocate limited financial resources to provide public facilities to various community plans. In addition, physical constraints and advantages such as groundwater resources, accessibility, and proximity to regional facilities may affect the geographical distribution of growth.

The plan concept for the Woodward Park community has evolved over the past 15 years with a dramatic increase in the intensity of planned urban development. Planned commercial areas have been expanded to a total of 213.7 acres and intensified with regional and general commercial uses projected along Freeway 41. Incremental approval of individual neighborhood and community commercial plan amendments has also expanded the inventory of designated commercial areas to several major street intersections and a substantial portion of the Herndon Avenue frontage east to Willow Avenue. Considering the extent of previously approved commercial uses and their relationship to facilities, services, and population, the prospect of an excessive amount of commercially designated land was recognized by the interim plan update.

Designated office areas have also increased phenomenally to 474 acres within the Woodward Park community. This community now includes designations for a large business park area, a mid-rise building corridor, the Herndon Avenue corridor, and anticipated regional medical facilities. These areas have the potential to accommodate seven to ten million square feet of office space at full development. With an average annual metropolitan area office building absorption rate of 200,000 to 250,000 square feet, this community alone contains a sufficient inventory of office-designated land to meet metropolitan needs for 20 or more years.

The Woodward Park Community Plan Update continues to depict much of the previously designated office and commercial uses which are expected to serve both local, community, and regional needs. However, due to the extensive amount of designated office and commercial uses, the plan update proposes to restrain development outside of the identified Woodward Community Activity Center and the Herndon Intensity Corridor (Figures 1-2.2 and 1-2.3 of the plan). In order to adequately serve local needs within the community, dispersed office development would be limited to a .5 acre per 1,000 population ratio and appropriate locations adjacent to local commercial centers.

The 1984 Fresno General Plan endorsed the concept of expanded and intensified residential development which would substantially change the residential character of the Woodward Park community. At that time, the planning area boundary was expanded to Willow and Copper Avenues and the prevailing planned residential use changed to medium density residential (4.99 to 10.18 dwelling units per acre). These changes increased the potential population capacity of the community to 130,000 people if developed at maximum density, and 100,000 people at the average density of six units per acre.

In January 1988, the Fresno City Development Department estimated the population of the planning area to be 16,200 people, which was 3.8 percent of the 424,200 metropolitan population. At that time, an accelerating community growth rate was projected to result in a year 2005 population of 62,400 or 10.6 percent of the metropolitan population. In August 1988, the City Council considered these population and development projections and the ramifications upon the community's living environmental and balanced metropolitan growth objectives. At that time, the Council directed the planning staff to focus the plan update on reduced population capacities and projections indicative of the current medium-low density residential growth trends.

In response to this direction, the Woodward Park Community Plan Update provides for the predominant residential characteristic to be medium-low density residential (2.19 to 4.98 dwelling units per acre). Multiple-family residences will continue to be an important, but secondary, component of the community's housing inventory. More intensive residential uses are concentrated around major employment centers and transportation routes. Distribution of higher density residences throughout the community is restrained to parcels which are not suitable for medium-low density residential development.

Based upon the plan's concepts and strategies, an overall population capacity of 65,000 people is provided by the staff-recommended alternative. Extension of the medium-low density residential designation to the plan perimeter, as indicated by the Committee's recommendation, would accommodate a population of 82,000. During the five-year interim planning period, the construction of an average of 800 dwelling units per year would result in a 1994 population of approximately 29,592 people.

SUMMARY OF IMPACTS AND MITIGATION MEASURES

The Woodward Park Community Plan Update is a refinement of the 1984 Fresno General Plan and an update of the 1976 Woodward Park Community Plan, for which environmental impact reports were prepared to examine the environmental consequences of urban development. Environmental Impact Report No. 10085, prepared for the General Plan, identified environmental impacts and mitigation measures related to expanded and intensified urban development which generally remain applicable to the community plan update. These environmental

TABLE EIR-3

SUMMARY OF SIGNIFICANT IMPACTS

Impacts	Unavoidable	Irreversible	Short-Term Use/Long- Term Effect	Cumulative	Mitigable
<u>Water</u>					
o Groundwater Overdraft	(*)		*	*	*
o Groundwater Contamination	(*)		*	*	*
o Reduced level of service	(*)			*	*
<u>Sewer</u>					
o Over demand for sewer capacity				*	*
<u>Traffic</u>					
o Congestion	*		*	*	
o reduced service levels					
o Increased volume	*		*	*	
<u>Air</u>					
o Increased mobile source air pollution	*		*	*	
o Continued particulate pollution	*				*
o Increased stationary source air pollution	*		*	*	*
<u>Noise</u>					
o Increased levels	*	*	*	*	*
<u>Geologic Seismic Soils and Agricultural Land</u>					
o Conversion of agricultural land	*	*	*	*	
<u>Energy</u>					
o Energy consumption	*	*	*	*	
<u>Plant and Animal</u>					
o No significant environmental impacts					
<u>Park and Open Space Areas</u>					
o No significant environmental impacts					
<u>Flood Control and Storm Water Drainage</u>					
o Potential water and soil contamination				*	*
<u>Historical</u>					
<u>Schools</u>					
o Continued student capacity deficiencies	(*)			*	*
<u>Fire and Emergency Services</u>					
o Potential reduction of service level				*	*
<u>Police</u>					
o Potential reduction of service level				*	*
<u>Library</u>					
o Potential reduction of service level				*	*
<u>Growth Inducing Effects</u>					
o				*	*

(*) Notes impacts which may occur if mitigation is not fully implemented

issues include the following: a) vehicle-emitted air pollutants; b) potential hazards due to groundwater contamination; c) depletion of groundwater resources; d) conversion of agricultural Class I and II soils to urban uses; e) consumption of nonrenewable energy resources; f) consumption of nonrenewable materials for construction; g) increases in traffic-generated noise; and, h) agricultural and urban land use conflicts.

The Woodward Park Community Plan Update has been prepared to provide more explicit guidelines and strategies for urban development in a manner responsive to previously identified environmental impacts and mitigation measures. In addition, the community plan and related EIR address resource constraints and community issues such as limited sewer trunk capacity, vehicular circulation and capacity constraints, excessively intensive land use designations, public safety services, school facilities, land use conflicts, and growth-inducing implications. The following table summarizes the potentially significant environmental impacts associated with adoption and implementation of the plan update.

EFFECTS FOUND NOT TO BE SIGNIFICANT

Environmental Impact Report No. 10085 prepared for the 1984 Fresno General Plan identified general categories of policies and implementation strategies which were not considered to have a significant environmental effect. Many policies do not involve environmental issues and do not lead directly or indirectly to significant physical changes. Those categories which apply to the Woodward Park Community Plan Update are identified as follows:

1. Policies supporting, encouraging or coordinating actions of the City of Fresno, other governmental agencies, and the private sector to achieve objectives of common interest, including those related to planning and environmental quality in particular.
2. Integration of environmental considerations and mitigation measures into plans, policies, and development standards.
3. Creation or modification of planning and development processes.
4. Policies to protect and conserve natural resources, historic buildings and sites, and sensitive habitats for scarce plant and animal species.
5. Procedures which do not involve substantial physical changes.
6. Strategies to provide funding sources to implement planned facilities and improvements. Identification and utilization of non-City funding sources.
7. Providing for the establishment or continuation of adequate programs, facilities, and services.
8. Recommendations for the subsequent planning or further analysis of areas, resource capacities or environmental issues.

A preliminary environmental review checklist was prepared to review the potential environmental consequences of the proposed community plan update. This checklist identifies those environmental effects which are not considered to be significant adverse impacts related to the proposed plan, policies and implementation measures, and is included in the EIR appendix.

ENVIRONMENTAL IMPACT ANALYSIS

GROUNDWATER RESOURCES

The Fresno metropolitan area, including the Woodward Park community, currently derives its water for domestic consumption from groundwater sources. Utilizing water wells to pump this water from deep underground, municipalities and other water purveyors and individual property owners have tapped this groundwater resource for a good supply of high-quality water. The continued availability of an adequate supply of groundwater, however, cannot be taken for granted and must be carefully managed to prevent excessive pumping or contamination, particularly in the developing northeast area.

Groundwater originates from surface water which percolates through the soil into the groundwater reservoir or aquifer. Aquifers are characterized as water bearing stratum of permeable rock, sand and gravel, and are the primary conductors of groundwater. The components of the groundwater hydrologic system include recharge of the groundwater reservoirs; transmission of water to, within, and from the reservoirs; storage within the reservoir; and, discharge from the reservoirs through pumping.

Historically, groundwater for the Woodward Park area is recharged by the following means: 1) groundwater percolation originating directly from rainfall and mountain snow melt runoff within the plan area or upgradient; 2) percolation from agricultural surface water irrigation occurring both within Woodward Park and areas to the east; and, 3) percolation from the San Joaquin River, local canals, creeks, and intermittent streams passing through the area.

An understanding of this process is vital to comprehending the project area's groundwater limitations.

For many years it has been generally thought that the groundwater reservoir is smaller and water wells less productive within the Woodward Park community. This observation has been collaborated by more detailed knowledge of geologic conditions and water well records gathered over the past decade. Current data has been summarized in the report entitled "Groundwater Conditions in the Fresno North Growth Area" (June 16, 1987), which was prepared by Kenneth D. Schmidt and Associates for the City of Fresno. Hydrologic and geologic observations and conclusions of this report were

made from data obtained from over 30 wells and test holes that had been drilled in this area by January 1987. Six of these test holes were drilled specifically for the north growth groundwater study, including one in Woodward Park (drilled to a depth of 800 feet.)

Aquifer Characteristics

Geologically, the Woodward Park area is composed of layers of alluvial sedimentary deposits which comprise the primary aquifers or water holding strata supplying groundwater for existing urban and agricultural use. Alluvial sedimentary deposits are primarily made up of a mixture of boulders, cobbles, gravels, sands and clays eroded from the Sierra Nevada and distributed by the San Joaquin River or intermittent streams. They are divided into two levels commonly referred to as the "upper alluvium" and the older "continental deposits." The upper alluvium is comprised mainly of cobbles, gravels, and sands with some clay deposits interspersed throughout the area. Normally 300 to 400 feet in depth, this surface alluvium comprises the most productive of the water bearing strata and is the primary deposit tapped by City water wells. In the Woodward Park area, the upper alluvium is generally thinner than elsewhere in the metropolitan area varying in depth from about 200 feet north of Copper Avenue, 250 feet near Woodward Park and the southeast corner of the study area, and about 300 feet near Pinedale. It is also heavily impregnated with clays which are less permeable. The lack of depth and presence of clay deposits severely restricts the upper alluvium's water carrying capabilities. As an example, wells located near Pinedale have produced up to 3,000 gallons of water per minute while wells located in the northeastern portion of the Woodward Park planning area are returning only 500 gallons per minute.

The second and deeper alluvium, referred to as the "continental deposit," is comprised of finer materials with a preponderance of clays and dense sands that restrict its water carrying capacity. Unlike the upper alluvium, where water quality is generally excellent, water found in the continental deposit is of a blue or green color and may contain iron, manganese, arsenic, and hydrogen sulfide, making it unsuitable for urban use.

Underlying these aquifers or alluvial deposits are two additional strata about which little is known other than their water carrying capacities are very low. First, a consolidated sandstone stratum made up of silts and compressed sands has been identified approximately 550 feet below the surface near the intersection of Behymer and Chestnut Avenues. It is assumed, but not proven, that this sandstone is prevalent throughout the Woodward Park area. Beneath it is the "basement complex" (crystalline rocks), again an area about which very little is known.

Near Pinedale, the top of the basement complex is believed to exceed 2,300 feet in depth. Near Herndon and Willow Avenues, the top of the basement complex is believed to be more than 1,400 feet deep. Near Copper and Willow Avenues, the top of the basement complex is believed to be about 500 feet deep.

Utilizing currently available information, the north growth area groundwater study estimated the existing ground and surface water resources being utilized in the planning area. Groundwater inflow to the area occurring along Willow Avenue, between Herndon and Copper Avenues, was estimated to be 10,000 acre feet annually. Average annual surface water use received through the Fresno Irrigation District was estimated to be 6,000 acre feet. The consumptive use of water, as of 1986, was estimated to be 10,000 acre feet with no apparent overdraft of the groundwater resource. However, expansion of urban development together with a potential decrease in surface water use was projected to result in a substantial water consumption deficit.

An average annual hydrologic budget was estimated for the Fresno-Clovis urban area for the years 1965-1977 by the Water Resources Management Plan for the Fresno-Clovis Urban and Northeast Fresno County, 1986. This budget estimates the total water inflow, outflow and storage within the area, identifying 564,000 acre feet of water input and 572,000 of output, resulting in an 8,000 acre foot deficit or overdraft. A total overdraft of 10,000 acre feet was calculated using long-term averages of groundwater levels as charted by hydrograph records.

Traditionally, the direction of groundwater flow has been from northeast to southwest. As the metropolitan population grew and corresponding groundwater consumption increased, a cone of depression occurred in the center of the urban area. Over the past several decades, this cone of depression now draws groundwater from the north and south away from the natural direction of groundwater flow.

The north growth area groundwater study examined well construction data, water level hydrographs, aquifer tests, and well production characteristics in order to identify geologic conditions, water level elevation contours, changes in direction of groundwater flow, and the volume of available groundwater. Groundwater levels ranged from a depth of 80 to 120 feet with a declining water level associated with the location of public water supply wells. Although a condition of groundwater overdraft in this area was not acknowledged, groundwater flows are apparently being altered to flow into a cone of depression south of Woodward Regional Park. North Copper Avenue groundwater is being drawn westerly across the San Joaquin River, probably due to large agricultural uses and expanding rural residential development in Madera County.

Within the Woodward Park and Northeast Metropolitan Areas, productive aquifers are confined to those strata located in the "older alluvium" and the upper portion of the "continental deposits." Their composition of boulders, cobbles, gravel, sand, silt and clay determines water carrying/holding capacity which increases when coarser materials are present and decreases whenever finer materials are encountered. The presence of clay is of particular importance in that it not only restricts water movement, but also retards groundwater percolation. Throughout the metropolitan area, clay is present in the form of thin, discontinuous layers occurring randomly throughout the City.

Within the Woodward Park area, however, these random clay layers coalesce into an approximate two-mile wide large underground berm that diagonally bisects the area, running from the northeast to the southwest. This berm, which begins northeast of Copper and Cedar Avenues and ends at Blackstone and Herndon Avenues, also contains substantial fine-grained strata thought to be deposited by intermittent streams rather than the San Joaquin River. These factors can dramatically affect the productivity of wells located within its bounds, reducing yields to as low as 800 gallons per minute. Wells located outside of this berm in the Pinedale area have tested at over 3,000 gallons per minute, with a sustained pumping average of 2,000 gallons per minute. When this is coupled with the lack of depth of aquifers in the northeastern portions of the study area, one will find individual wells with a pumping capacity of less than 500 gallons per minute. Water quantity, sufficient to provide both domestic consumption and fire suppression flows, becomes a problem for the rapidly developing northeastern portion of this community.

Groundwater Recharge

The balance between groundwater consumption and replenishment is maintained by the recharge and inflow of groundwater from excess irrigation water, stream and water conveyance channels, and groundwater from upgradient areas. However, the continued effectiveness of these sources may be jeopardized by reduced agricultural irrigation, siltation or concrete lining of water channels, and increased consumption of water upgradient from the planning area. Previous EIR's examining expanded northward urban development (EIR No. 10084, Woodward Lakes Development; and, EIR No. 10076, Dominion Planned Community) have indicated that changes in the direction of groundwater flow caused by increased consumption could reverse groundwater flows away from the San Joaquin River channel into the planning area. However, increased consumption of groundwater in Madera County could continue to draw groundwater to the west and northwest, away from the planning area.

Water Quality

The Environmental Protection Agency (EPA) must establish primary drinking water regulations for public systems in accordance with the National Safe Drinking Water Act (SDWA). These regulations must identify contaminants having any adverse health effects on people and specify a maximum contamination level (MCL) or treatment technique. Recommended Maximum Contamination Levels (RMCL) are first established as unenforceable goals which identify the level at which no known or anticipated adverse effects upon health will occur and allow an adequate margin of safety. When an RMCL is issued, the EPA is required to eventually follow-up with promulgation of an MCL which is enforceable and must be set as close to the RMCL as feasible.

States may assume primary enforcement responsibility, as has California, by adopting regulations that are no less restrictive than the federal MCL standards. In addition, primary drinking water regulations must provide criteria and procedures, such as

monitoring and reporting requirements, to assure that public water systems comply with MCL standards. For pollutants which the EPA has not, as yet, established standards, the state may establish action levels which are unenforceable guidelines set at a level above which regular consumption may pose a health risk.

The quality of groundwater utilized for domestic purposes throughout the metropolitan area has generally been excellent. However, it has become increasingly evident that this resource is vulnerable to contamination from naturally occurring or man-made pollutants. Recent studies, such as the 1986 Water Resources Management Plan, have concluded that a more thorough understanding of the groundwater system and its potential exposure to pollutants must be incorporated into comprehensive monitoring and management plans. Within the Woodward Park planning area, dibromochloropropane (DBCP) and nitrate pollution have been detected which appear to be the most immediate threats to groundwater quality. To the west of the planning area, trichloroethylene (TCE) and pentachloroethylene (PCE) have been detected, which has necessitated the discontinued use of five public wells and the loss of a potential supplemental water source for the Woodward Park planning area.

The use of DBCP was common from 1950 through August 1977 as a nematocide to protect the roots of fruit-bearing trees and vines from being damaged by microscopic worms called nematodes. Its use has been banned by the EPA since 1979, who has identified it as a testicular toxin (sterilant) and potential humane carcinogen. The California Department of Health Services set a recommended action level of 1.0 ppb (part per billion), recommending that water for domestic consumption not equal or exceed this amount. However, it is expected that this action level will soon be reset at a more restrictive level of .2 ppb.

The 1987 Northeast Growth Area Groundwater Study tested 19 water wells for DBCP. These tests identified the northern and southeastern portions of the planning area as having DBCP levels exceeding .1 ppb. Four wells in the southeast had levels ranging from 2.3 to 4.6 ppb. Levels in the north have ranged from .01 to 1.7 ppb over the past eight years. To the south of the planning areas, Fresno City Pump Station No. 88 has been taken out of service with a DBCP level of 2.0 ppb.

Groundwater resources within the planning area appear to be more vulnerable to groundwater degradation than other portions of the metropolitan area. Contamination of DBCP occurs primarily within the older alluvium which becomes thinner with fewer aquifer levels in the northeast growth area. This affords little opportunity to design water wells which would tap only deeper, less contaminated aquifers. In addition, increasing concentrations of DBCP could be introduced as consumption increases and normal groundwater flows from rural areas to the north and east are accelerated.

Several alternatives are available to reduce DBCP concentrations that currently exceed state action levels. Groundwater containing a moderate concentration of DBCP can be diluted to an acceptable level by mixing it with water which has a lower concentration.

Charcoal filtering systems can also be used, but at an estimated cost of \$800,000 per well, which is two and one-half times more than the cost of drilling and equipping a City production well. The third alternative is to avoid using groundwater from areas where higher concentrations have been detected.

In order to maximize detection of groundwater contaminants, the Fresno City Public Works Department has instituted a comprehensive water quality monitoring program. The first year sampling plan, beginning January 1989, implemented the following monitoring schedule for groundwater contamination.

1. Bacterial - test 60 or more wells per week.
2. Volatile Organic Chemicals (VOC) - test all wells quarterly for 60 compounds, including primary and breakdown products for most fuels and solvents used in agricultural, commercial and industrial enterprises.
3. Title 22 Inorganics - test every three years for nine metals, plus nitrates.
4. Title 22 Organics - test all wells quarterly for 14 pesticides, herbicides and VOC's.
5. DBCP and EDB - test all wells quarterly.
6. Radiological Monitoring - test all wells quarterly.
7. General Mineral and Physical - test all wells every three years.

Consumption

The future water consumption demands of urban development have been projected using average and peak total gross water consumption calculated on a per capita basis. Over the past 20 years, the total gallons per capita per day (GPC/Day) average has ranged from 374 to 266, with an average in recent years of approximately 300 GPC/Day. Total average daily water use at full development of the Advisory Committee's alternative plan (82,000 population) would be 24,600,000 gpd (gallons per day), with an annual use of 27,560 acre feet. An average total water flow rate of 17,080 gpm (gallons per minute), plus an additional 2,000 gpm for fire flow, would be necessary to accommodate average daily demand. Applying a peak hour to average day multiplying factor of 2.75 results in a peak flow demand of 46,970 gpm ($17,080 \times 2.75$).

The total pumping rate of public water wells within or contributing to the planning area is 8,530 gpm. Two additional wells are expected to be constructed in 1989 within the Woodward Regional Park. These two wells have a combined potential flow rate of 4,300 gpm. This total flow rate could accommodate the peak hour demand for a population of 22,390. An additional flow rate capacity of 34,140 gpm would be necessary to accommodate full development of the planning area (82,000 people). With an average flow rate of 1,000 gpm (Northeast Fiscal Impact Study), an additional 34 wells

would be required. Full development of the staff-recommended plan alternative (65,00 population) would reduce this water increase to 30,000 gpm or 30 water wells.

In order to sustain current groundwater conditions, previous water studies have noted that groundwater recharge efforts equivalent to projected water consumption would require the importation of surface water. Consumptive water use, which does not return to the planning area's aquifer, is estimated to be 80 percent of the total consumption or 23,048 acre feet per year at total development. If 50 percent of the average annual rainfall received directly within the planning area is returned to the aquifer, this would account for 2,700 acre feet. Previous studies have estimated that an average of 6,000 acre feet of surface irrigation water has been utilized within the plan area. If this irrigation water is used for recharge, an additional 13,348 acre feet of surface water would have to be allocated to the northeast area to balance groundwater use at full development.

A program to increase groundwater recharge must consider utilization of additional surface water entitlements, expanded water conveyance systems, and additional water retention facilities. Approximately 45 percent of the planning area is located within the Fresno Irrigation District, which manages surface water entitlements and water conveyance systems. The Fresno Metropolitan Flood Control District has seven existing or planned ponding basins within the planning area which may be utilized for recharge, but are located to maximize storm water disposal. The City of Fresno presently has a total annual surface water entitlement of 100,000 acre feet with an additional 19,000 available by 1994. Allocation of additional surface water quantities and financial resources to construct and maintain recharge facilities would be necessary to maintain balanced groundwater conditions.

Five water delivery alternatives were identified by the 1987 Fiscal Impact Study of the Northeast Growth Area which included groundwater pumping within the plan area, importation of groundwater, groundwater recharge, and treatment of surface water for domestic consumption. The estimated costs ranged from \$10.4 million for imported groundwater to \$24 million for treated surface water. Since that time, the identified water well field area northwest of North Blackstone and West Herndon Avenues has experienced a significant reduction in groundwater yield due to trichloroethylene (TCE) contamination in excess of the 1 ppm MCL level. This contamination has essentially eliminated this area as a source of groundwater for the Woodward Park community.

Impacts

Reliance upon groundwater wells located entirely within the planning area to meet future water supply needs does not appear to be reasonable given the present understanding of geologic and aquifer conditions. During the past two years, low water pressure has been experienced at peak demand periods causing inconvenience and water customer dissatisfaction. These conditions have resulted from the inability to acquire satisfactory water well site locations in a timely manner within the planning area. Reliance upon

groundwater wells within the planning area to accommodate continued urban development could result in the following environmental impacts.

- o Reduced service level - Insufficient water supply to meet domestic and fire suppression water service needs of the plan area and reduced service levels in adjacent community plan areas due to transportation of water to the Woodward community.
- o Groundwater overdraft - Excessive consumption (overdraft) and decreased recharge of groundwater within the planning area altering the direction of groundwater flows, enlarging the groundwater cone of depression, and reducing groundwater flow through the plan area to adjacent community plan areas.
- o Groundwater contamination - Accelerated groundwater inflow from the north and east which may contain higher levels of DBCP.

Mitigation Measures

Mitigation measures have been identified and incorporated into the Woodward Park Community Plan Public Facilities and Environmental Concerns sections addressing water quantity, quality, availability and delivery concerns. Diligent implementation of these measures, identified by Policies 7-3.1 through 7-3.13 and 8-1.1 through 8-1.9, will provide for long-term management of water resources in a manner which will reduce environmental impacts associated with the project and protect the public's health, safety and welfare. While the intent of these mitigative measures is to assure the long-term availability of safe drinking water, short-term impacts may occur. The following mitigative measures are recommended:

- o The City of Fresno shall prepare an annual water budget and capital improvement program which projects water consumption demand, water delivery capability, and water well improvement commitments.
- o Plans for UGM service delivery shall require the dedication of a satisfactory water well site which can accommodate a wellhead water treatment system as a condition of development when determined necessary by the City of Fresno in order to provide adequate water delivery.
- o Incorporate the cost of providing wellhead water treatment facilities for DBCP contamination into the UGM water well fee which shall apply to all development entitlements which are approved or extended after adoption of the Interim Woodward Park Community Plan Update.
- o Escalate UGM water well fees to pay for test holes, production well drilling, and equipping of pump stations when 50 percent of the demand for service is created by development.

- o No new development shall be approved unless the City's minimum acceptable level of service for public water supply can be assured.
- o Implement policies 7-3.1 through 7-3.10 and 8-1.1 through 8-1.9 of the Development Department's recommended plan.

SEWER SERVICE

The provision of adequate public services and facilities necessary to accommodate urban development is a major consideration in planning for the future of the Woodward Park community. The development of adequate street capacity, water volume and quality, and sanitary sewer disposal was noted by the 1984 Fresno General Plan as a significant obstacle to the implementation of expanded north-eastern urbanization. A financial feasibility study was required and has been completed, as required by the 1984 Fresno General Plan, in order to determine whether the extraordinary costs of providing these facilities can be accommodated by urban development.

The Fiscal Impact Study of the Northeast Growth Area concluded that additional wastewater collection, street capacity, and water volume can be provided, but at a substantially increased cost. In order to finance the cost of the sewer collection system, the study concluded that each new residence within the Woodward Park community would have to pay an additional connection fee ranging from \$1,200 to \$1,400. The total estimated additional charges to meet the extraordinary costs of providing adequate sewer, street, and water facilities could cost \$17,000 per acre to accommodate additional northeastern urbanization, as designated by the 1984 Fresno General Plan.

Existing Conditions

The cost of providing sanitary sewer facilities to the Woodward Park community may be relatively high due to its location and relationship to the metropolitan area. As the designated regional sewerage agent, the City of Fresno treats all wastewater collected by public sewer systems, with the exception of Malaga. A trunk sewer system, generally consisting of pipe sizes of 30 inches or more in diameter, transports sewage by gravity flow from throughout the metropolitan area to the City's regional wastewater treatment plant, which is located downgradient approximately two and one-half miles southwest of the planned metropolitan urban area.

The City's wastewater treatment plant has a capacity to treat 60 mgd (million gallons per day) of sewage, and presently treats an average volume of 48 mgd. With the present rate of growth and the potential for connecting existing unsewered urban development to the plant, it is expected to reach capacity in less than ten years. Decisions concerning the timing and financing of plant

expansion may affect future urban development throughout the metropolitan area. A consultant has recently been retained by the City of Fresno to prepare a plan for facility expansion.

A specific concern to the Woodward Park community is the limitation of sewer trunk capacity to transport sewage from the northeast area to the treatment plant. Urban development within the Woodward Park community is presently served by the Herndon-Cornelia sewer trunk. This trunk line runs along the south boundary of the planning area (Herndon Avenue), and extends 14 miles west and south to the treatment plant. As development occurs, local collection systems are constructed to drain sewage into north-south running major sewer mains. Major sewer mains anticipated to serve this area would range in size from 21 to 42 inches in diameter, and would connect to the Herndon trunk at one-half mile intervals on the major street alignments.

The local sewer collection systems and major sewer mains are installed by property developers or assessment districts in accordance with the City's development standards and policies. Pipe sizes are established by the City to accommodate sewer flows anticipated to be generated by planned urban uses. These systems can provide a measure of flexibility to accommodate changing land uses and sewer capacity demands. In the past, however, several areas within the City have experienced capacity limitations as the intensity of development increased beyond the design capacity of a sewer main or collection system. The existing major sewer mains within the Woodward Park community are generally adequate to serve the maximum intensity depicted by the 1984 Fresno General Plan for this area.

The Herndon-Cornelia trunk line was primarily financed by state and federal funds in order to connect existing urban development such as the Highway City area, the Pinedale County Water District (P.C.W.D.), and Pinedale Public Utility District (P.P.U.D.) to the regional wastewater treatment facility. Extension of the Herndon trunk east to Willow Avenue was required in order to provide the City of Clovis with access to the regional sewer system. New urban growth to be accommodated by the sewer trunk within the Woodward Park plan area was essentially limited to the planned low and medium-low density residential uses designated by the 1974 Fresno-Clovis Metropolitan General Plan. The sewer trunk also serves the area north of Herndon Avenue, west to Polk Avenue, and the service area of the Gates sewer main south of Herndon Avenue.

Projected Sewer Demands

The amount of capacity within the Herndon-Cornelia trunk line to accommodate urban development was one of the significant issues considered when the Woodward Park Community Plan was prepared in 1975. At that time, it was anticipated that sufficient capacity would be available to accommodate a population of 25,000 within the Woodward Park Community Plan portion of the Herndon service area. However, as more expansive and intensive urban development occurred subsequent to adoption of the Woodward Park Community Plan, the capacity of the Herndon trunk to accommodate increasing land use intensities became a reoccurring issue.

In 1980, the Public Works Department reported to the City Council that the Herndon-Cornelia trunk sewer could accommodate planned or approved urban uses within the Herndon service area as far south as the Gates Avenue sewer discharge into the Cornelia trunk line, just north of Shaw Avenue. At that point, the sewer trunk capacity would be deficient due to increases in the amount and intensity of urban development which had occurred. Urban development occurring within the western portions of the Bullard and Fresno High-Roeding Community Plans were not intended to be served by the Herndon-Cornelia trunk line. In 1983, two additional trunk sewer service areas, the Grantland and the Cornelia, were identified and sewer trunk fees established to serve the areas generally west of Valentine Avenue. New developments have been required to pay these fees and allowed to connect to the Herndon-Cornelia trunk line on an interim basis.

The 1984 Fresno General Plan designated new urban growth areas including an additional 3,400 acres within the Woodward Park Community Plan, of which 3,150 acres were identified as the north-east growth area. The General Plan, however, noted that extraordinary costs would be incurred in extending urban facilities, including sewer trunk capacity.

On January 12, 1988, the Fiscal Impact Study of the Northeast Fresno Growth Area was presented to the City Council. This study more precisely identified the extraordinary costs of extending urban facilities and examined potential financing alternatives. Sewer trunk relief alternatives were examined to provide additional sewer capacity to the Woodward Park community, either individually or in combination with the Cornelia and Grantland service areas. The estimated cost of these alternatives ranged from \$27 to \$38 million. For the preferred alternative, it was estimated that an average per dwelling unit sewer trunk fee of \$1,175 would be necessary to finance its construction.

Projected sewer capacity demand and corresponding trunk sewer fees were calculated by the fiscal impact study assuming full development of undeveloped areas at the maximum residential density identified by the 1984 General Plan. This method provided an estimate of the highest potential demand for sewer service (175,000 people) and the cost of meeting this demand within the Woodward Park Community Plan area. However, this population of 175,000 people would be more than one-half the present population of the City of Fresno, and seven times greater than that originally planned for the Woodward Park community.

On August 30, 1988, the Fresno City Council directed that the Woodward Park Community Plan Update be prepared as an interim plan to guide continued medium-low density residential growth trends, as may be accommodated by the maximized use of the Herndon sewer trunk. The Herndon Sewer Trunk Study, prepared by the engineering firm of Black and Veach, was commissioned cooperatively by the City of Fresno and the Building Industry of the Central San Joaquin Valley in order to identify the total available sewer capacity including low-cost enhancements, current sewer generation rates, and the remaining urban development capacity of the sewer trunk line. This study metered existing sewage flows, calculated daily per capita sewage discharge rates and peak factors, estimated incursion and infiltration rates, and evaluated the sewer capacity

demand of alternative land use concepts by computer model. The sewer computer model (BVSWR), developed by the consultant, was used to determine the maximum extent of urban development which can be accommodated by the trunk line with and without capacity enhancements. Based upon this information, it was concluded that the Herndon trunk sewer would require \$3,106,000 in capacity enhancements to accommodate full development of the Committee-recommended alternative, and \$1,080,000 for the Development Department-recommended alternative.

Impacts

- o Allowing maximum use of the Herndon sewer trunk may impair the City's ability to conduct maintenance or repair functions and may decrease the service life of the trunk line.
- o Increased sewer flows in the Herndon trunk could contribute to flow conditions which exceed capacity downstream in the Cornelia portion of the trunk system.

Mitigation Measures

- o Implement a sewer trunk fee for new development to finance the Herndon sewer trunk capacity enhancement and a proportionate share of the proposed Grantland sewer trunk.
- o Implement the Staff Alternative Plan Policies 7-2.1 through 7-2.9 to assure that sewer flows generated by urban development will not exceed capacity.
- o Implement water conservation strategies as identified by the EIR's Water Section.

TRAFFIC CIRCULATION

The circulation system within the City of Fresno consists of a network of local streets, collectors, arterials and expressways augmented by a partially-constructed freeway system. The physical characteristics and functions of each of these street types are described below.

Freeways

These are divided highways having no direct access and no intersections at-grade. All access is achieved by on and off ramps. They may carry average traffic volumes of 72,000 to 108,000 vehicles per day at peak service levels for four- and six-lane configurations and serve metropolitan or regional travel needs.

Expressways

These are generally four- or six-lane divided roadways with access limited to signalized, at-grade, half-mile major street intersections in order to accommodate longer trips at higher speeds through the metropolitan area. They may carry average

volumes of 42,000 to 45,000 vehicles per day at peak service levels for four- and six-lane configurations.

Arterial Streets

These are generally four- or six-lane divided roadways which are signalized at half-mile intersections with major streets, and quarter-mile local street intersections when necessary. Direct access may be reduced by limiting driveways or using front- age roads, but it is not as restrictive as on expressways. Arte- rials are the main circulation component of the community, serving large areas or intensive urban activities. They normally carry a range of 28,000 to 36,000 vehicles per day at ideal capacity levels.

Collector Streets

These are generally four-lane undivided streets accommodating internal traffic movement within an area, distribut- ing local traffic to the arterial street system, and serving local activity centers such as parks and schools. Access to abutting property is generally permitted, with the exception of single-family residences. Collector streets may carry 24,000 vehicles per day at ideal capacity service levels.

Local Streets.

These are minor streets which primarily provide direct access to parcels fronting along them. They generally have two travel lanes and can carry traffic volumes of 1,000 to 2,000 vehicles per day. However, volumes of 750 or more are often considered a nuisance on residential local streets which should be designed to discourage through traffic.

The City's major street system has been generally developed in a grid pattern of alternating collector and arterial streets spaced at half-mile intervals, and several irregularly spaced expressways and freeways. Generally, this system has provided an acceptable level of service by offering alternative routes for trip destina- tions and thereby limiting the potential for congestion.

Within the Woodward Park Community Plan area, however, the normal continuous grid system is disrupted by the San Joaquin River- bottom. With fewer alternative community routes, traffic is concentrated on several of the regionally significant routes, many of which remain only partially developed. Freeway 41 is currently being constructed through the community, while Freeway 168 to the southeast has yet to be constructed. The expressway system, currently represented by Herndon Avenue and Friant Road, has been partially developed with two- and four-lane roadway widths, but is being planned for expansion to six lanes. Arterial and collector streets, which are constructed incrementally as urban development occurs, have also remained with only intermittent sections completed within the planning area. Consequently, the community has experienced intermittent traffic congestion and inconvenience due

to incremental construction activities and the lack of alternative routes. At times, intersection congestion along Herndon Avenue has become severe enough to delay emergency vehicle access to St. Agnes Hospital.

Proposed Circulation System and Future Conditions

The Interim Woodward Park Community Plan Circulation Element is designed to support the plan concept of strategically located major urban activity and corridor areas balanced with a reduced intensity suburban fringe residential community. The major street system responds to existing land use and circulation commitments, physical barriers, anticipated regional population growth, and planned regional transportation routes. To the extent appropriate, the alternating collector street and arterial street grid pattern is extended throughout the community and important local streets are designated, where necessary, to serve high-intensity areas.

PLAN UPDATE - MAJOR STREET CIRCULATION SYSTEM

Freeways

Freeway 41 (under construction)

Expressways

Friant Road (partially constructed)
Herndon Avenue (completed; four lanes)
Willow Avenue (Alluvial to Copper)

Arterials

Blackstone Avenue
Fresno Street
First Street/Audubon Drive
Cedar Avenue/Champlain Drive
Chestnut Avenue (Shepherd/Herndon)
Nees Avenue
Shepherd Avenue
Copper Avenue
Maple Avenue (Behymer/Copper)
Behymer Avenue (Willow/Maple)

Collectors

Millbrook Avenue
Maple Avenue (Herndon/Perrin)
Alluvial Avenue
Teague Avenue
Perrin Avenue
Fort Washington Road
Cole Avenue
International Avenue
Cedar Avenue (Perrin/Behymer)
Behymer (Cedar/Maple)

Intercommunity and regional roadways form the framework for the community circulation system and allow external traffic to continue through the community. This framework consists of a freeway (State Route 41) and three designated expressways (Herndon Avenue, Friant Road, and Willow Avenue). The classification of Willow Avenue as an expressway north of Alluvial Avenue would expand its function from an arterial street, as shown by the 1984 Fresno General Plan, to a regional traffic carrier serving the northeast metropolitan and County areas. In addition, the planned Freeway 168 route to the southeast is expected to serve as a significant transportation route for this community.

The proposed arterial street system is planned to provide access to the regional routes, adjacent communities, and areas of highly intensive urban use. Curvilinear alignments have been designated

for such streets as Fresno, First/Audubon, Cedar/Champlain, and Chestnut/Maple in order to distribute traffic to various points along the regional routes and reduce congestion at key points of access. The Chestnut/Maple curvilinear alignment north of Shepherd Avenue shifts the arterial street to the west in order to expand its service area in the north central portion of the plan area and provide an alternative route to Cedar Avenue. East-west routes, such as Nees, Shepherd, and Copper Avenues, will provide access to Freeway 41, Friant Road, and the community's highly intensive urban activity center.

The plan essentially provides for the continuation of the current grid pattern collector street system, with several modifications necessitated by community conditions. Collector streets are not proposed for extension through the Fort Washington Country Club or San Joaquin Riverbottom areas, which will be served by perimeter streets. The plan also provides for the curving of the Fort Washington Road/Millbrook Avenue collector street to the east of the Friant Road and Copper Avenue intersection and changing the designation of Chestnut Avenue, north of Perrin, to a collector. Finally, the circulation plan identifies several local streets within the Herndon Avenue corridor to serve high-intensity urban development.

The traffic-carrying performance of a street or intersection is categorized by a level of service rating ranging from A (unrestricted flow) to F (severely restricted flow). The Fresno City Public Works Department has indicated that levels of service ranging from A through D are acceptable, while levels of E and F are not. Abbreviated descriptions of these service levels are as follows:

Service Level A	Fluid traffic flow with maximum speeds as allowed by speed limits.
Service Level B	Stable traffic flow with slight restrictions on speed and maneuverability.
Service Level C	Stable traffic flow with most drivers restricted in speed and maneuverability.
Service Level D	Approaching unstable flow with reduced speeds, maneuverability and convenience which can be tolerated during periods of congestion.
Service Level E	Constricted traffic flow occurs for longer periods of time and greater severity than level D and is considered undesirable.

Service Level F

Forced flow with low speeds and traffic stoppages occurring during peak use and minimal traffic flow with "gridlock" in extreme conditions.

Future traffic volumes have been projected using the Fresno County Council of Government's (COG) MINUTP traffic model. Three alternative land use plans were evaluated for comparative purposes including 1984 Fresno General Plan densities, the recommended plan update by the Development Department, and the Committee-recommended plan update. Figures 3 through 5 display projected average daily traffic volumes and identify the street segments that will experience congestion and traffic delay at full development of the planning area.

Based upon projected traffic volumes, the community's circulation system will remain vulnerable to traffic congestion and declining levels of service as the extent and intensity of urban development increases. The 1984 Fresno General Plan identified the need to construct "extraordinary" street capacity and circulation system improvements, including Freeway 168, in order to accommodate substantially expanded urbanization. A more detailed analysis, completed by the Northeast Growth Area Fiscal Impact Study (1987), presented alternative street capacity enhancement strategies with a total cost of \$7,215,000 or greater. Even with these capacity improvements, however, extremely high congestion would occur on several regionally significant routes, such as Herndon Avenue and Friant Road. In addition, many other major streets within the planning area and adjacent community would function at a D level of service or worse.

The extremely high traffic volume projections associated with the 1984 General Plan concept appear to be the result of the following factors:

1. Predominance of higher planned densities (medium density residential - five to ten dwelling units per acre) than has occurred elsewhere in the City.
2. The location of extremely large amounts of commercial and office development planned at major street intersections in the Woodward Park community.
3. The extensive residential growth projected in the rural and Sierra foothill areas to the north and east of the community.

In order to reduce projected traffic volume increases and related congestion, the plan update proposes several land use and circulation strategies. These are summarized as follows:

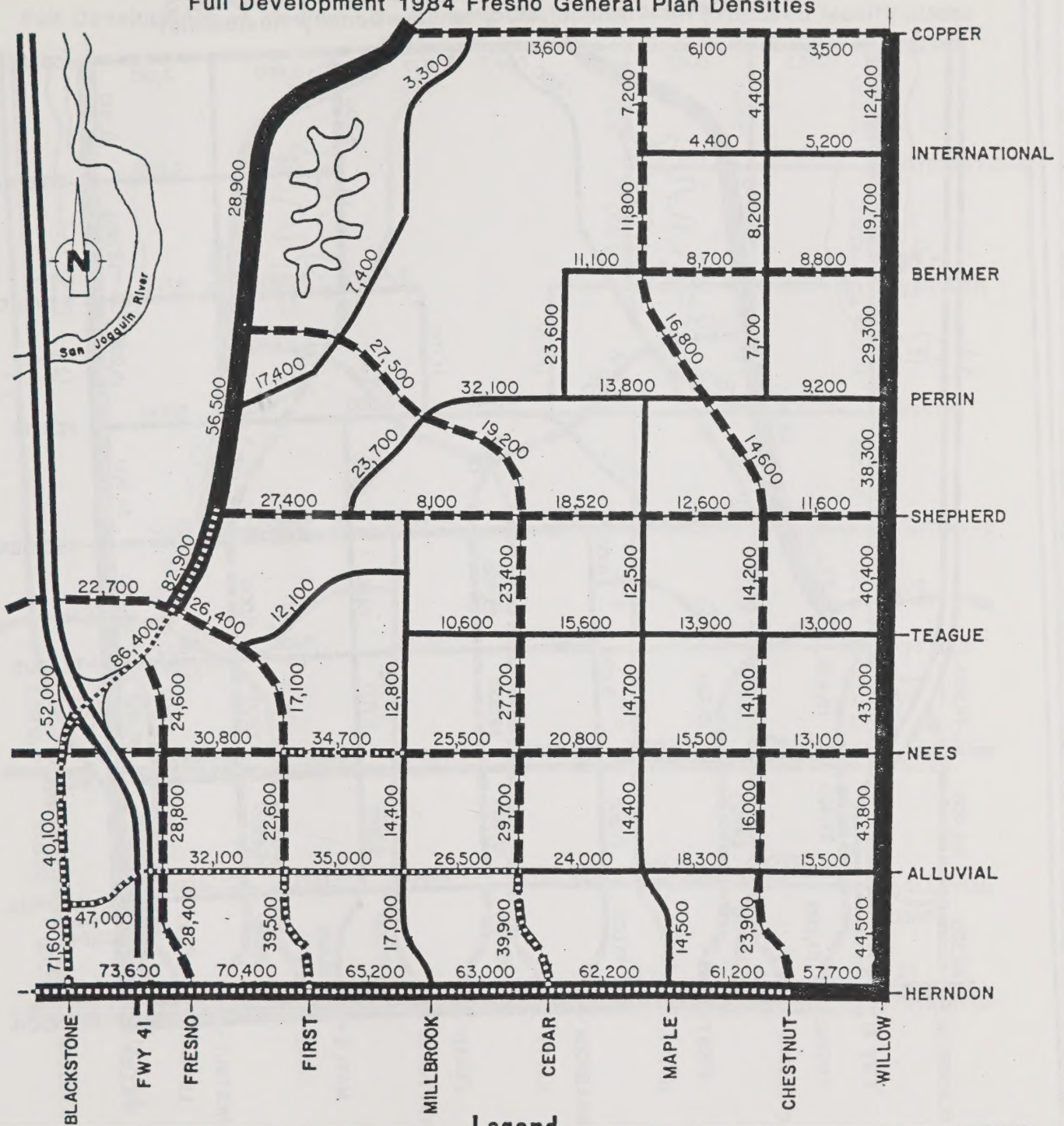
1. Reduced residential densities throughout a majority of the plan area with higher density residential neighborhoods focused around intensive office and commercial areas.

FIGURE EIR-3

Woodward Park Community Planning Area

PROJECTED DAILY TRAFFIC VOLUMES

Full Development 1984 Fresno General Plan Densities



Legend

20,000 - AVERAGE VEHICLE TRIPS PER 24-HOUR PERIOD

..... INSUFFICIENT TRAFFIC CAPACITY

FIGURE EIR-4

Woodward Park Community Planning Area

PROJECTED DAILY TRAFFIC VOLUMES

Full Development of Medium Low Density Residential

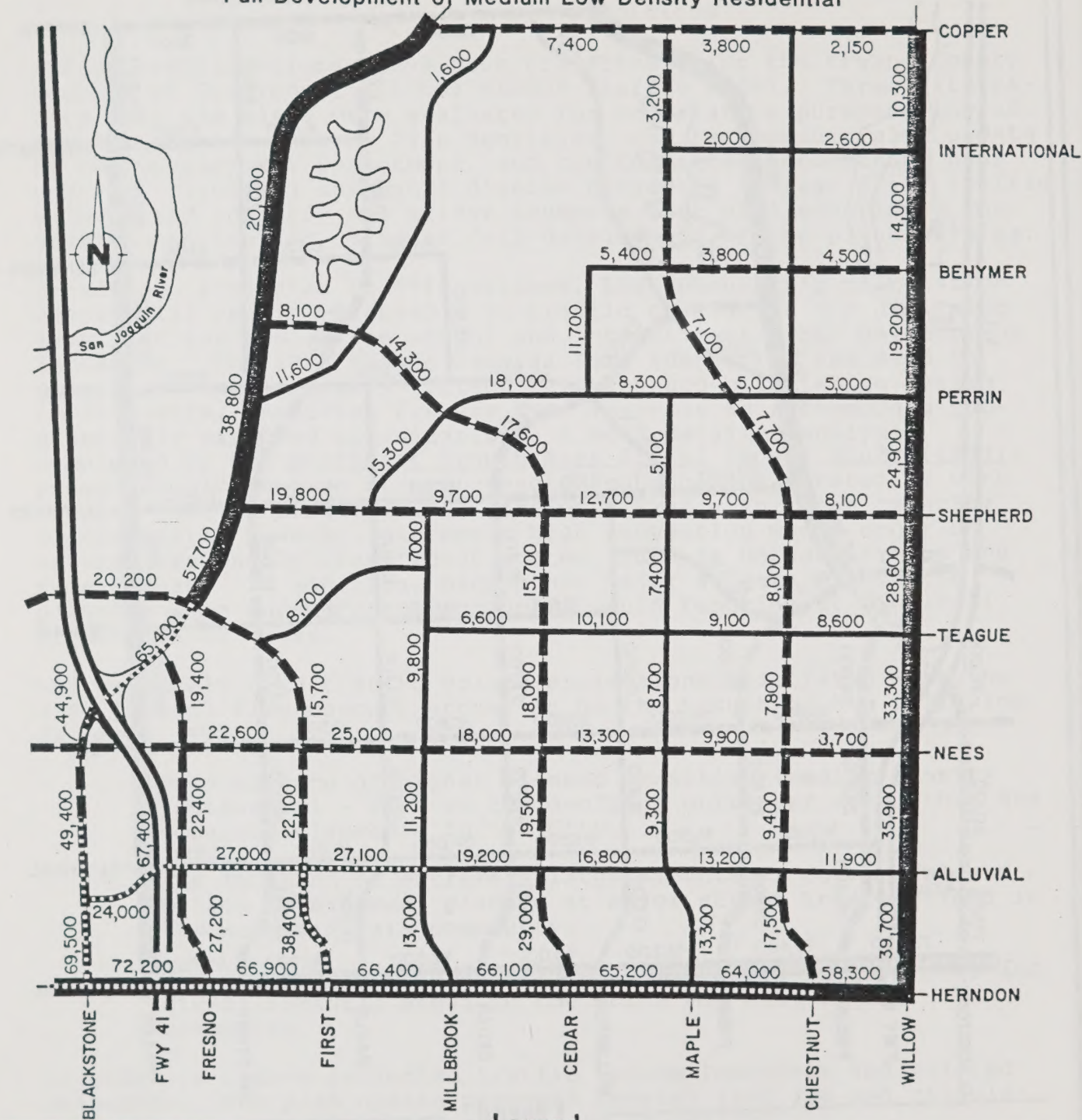
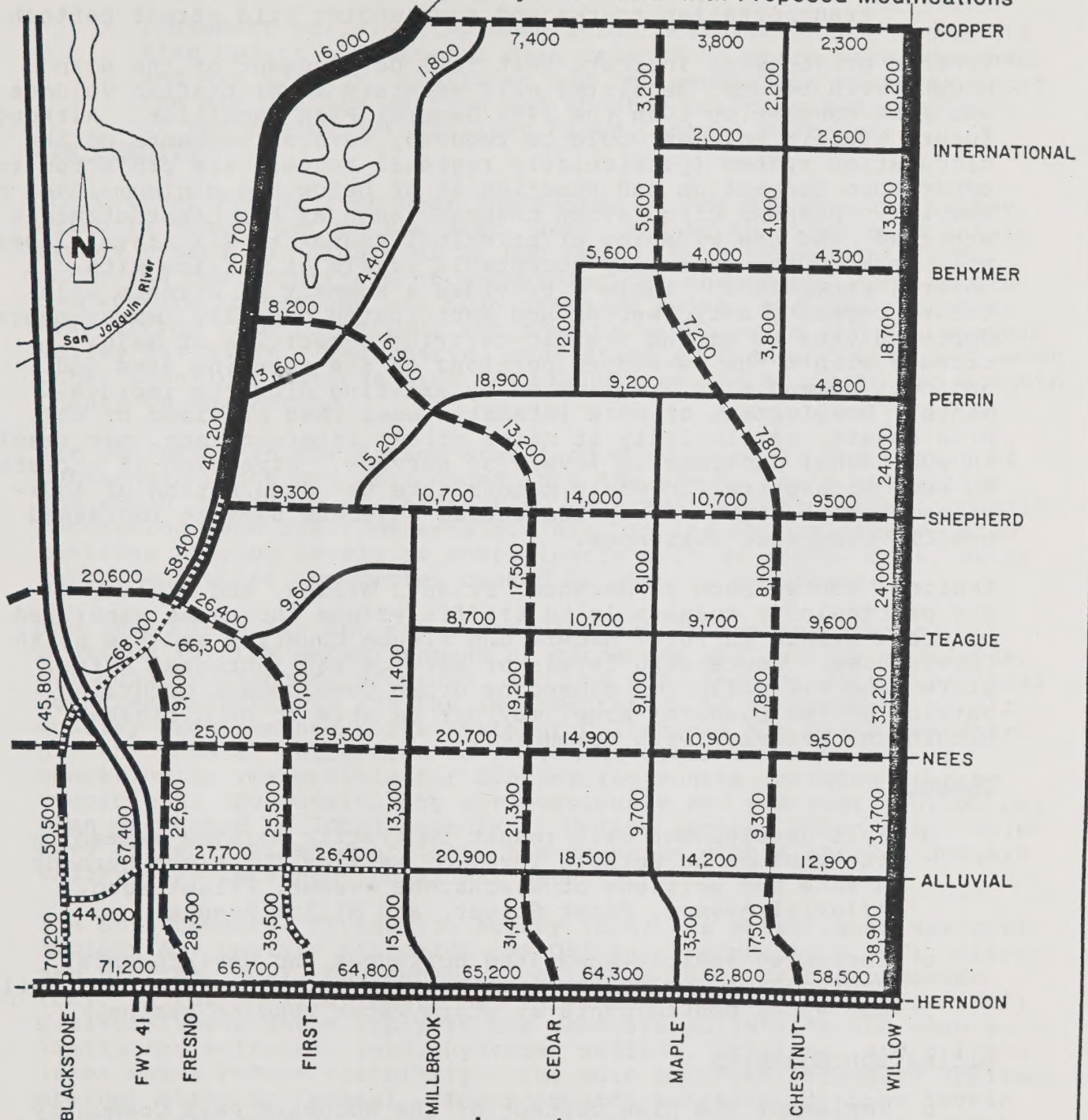


FIGURE EIR-5 Woodward Park Community Planning Area PROJECTED DAILY TRAFFIC VOLUMES

Full Development of Medium Low Density Residential with Proposed Modifications



2. Limited amounts of office and commercial uses outside of the high intensity areas along Freeway 41 and Herndon Avenue.
3. Integrate the major street system with regional transportation routes and surrounding grid street pattern.

Traffic projections indicate that full development of the plan update with reduced densities will generate lower traffic volumes and less congestion than the 1984 General Plan densities. Although future traffic volumes would be reduced, several segments of the circulation system (particularly regional routes) are projected to experience congestion and function at or below the minimum level of service. Planned circulation changes, such as the Chestnut/Maple arterial, and the widening of principal routes to six travel lanes will provide for generally acceptable levels of service with several exceptions. Table 4 provides a summary of streets with future capacity deficiencies and anticipated capacity improvements. Opportunities to expand traffic-carrying capacities of major streets within the developed portions of the planning area and adjacent communities are limited by existing property improvements. Development of more intensive uses than provided by the plan update, particularly at major street intersections, may result in additional declines in levels of service. Expansion of streets to accommodate traffic would necessitate the acquisition of additional street right-of-way and expose adjacent uses to increased traffic-generated nuisances.

Regional routes such as Herndon, Friant, Willow, and Freeway 41 are particularly vulnerable to traffic volume increases generated by urban growth in rural Madera and Fresno Counties and the north Clovis area. Decreasing levels of service and increased noise, glare, and air pollution caused by urban development occurring outside of the planning area, may not be able to be mitigated within the Woodward Park community.

Impacts

- o Full development will result in traffic volumes exceeding the minimum acceptable level of service (D) along Herndon Avenue and portions of Blackstone Avenue, Friant Road, Alluvial Avenue, First Street, and Willow Avenue.
- o Increased vehicle-generated nuisances and environmental degradation including glare, noise, air pollution, and soil and water contaminants at storm water ponding basins.

Mitigation Measures

- o Implement the plan concept of the Woodward Park Community Plan Update and related policy/implementation measures to establish balanced land uses with supportive circulation and transportation facilities in order to reduce vehicle travel and congestion. (Policies and implementation measures under the Land Use, Circulation and Transit Sections).

- o Implement policies/implementation measures and development standards of the Community Plan Update, General Plan, and adopted ordinances to minimize exposure to noise, glare, and localized pollution. (Policies and implementation measures under the Land Use, Circulation, and Noise sections).
- o Implement policies/implementation measures of the Community Plan Update and General Plan related to storm water drainage and air quality (Policies and implementation measures under the Air Quality section and adopted policies and standards of the Fresno Metropolitan Flood Control District).

AIR QUALITY

The City of Fresno lies near the center of the San Joaquin Valley, which is "boxed-in" on the east, west, and south sides by mountain ranges rising to heights of 14,000 feet. This topographic situation and the occurrence of meteorological phenomena, such as air temperature inversions and high pressure cells, reduces air movement giving rise to serious air quality problems in the San Joaquin Valley Air Basin. This basin, consisting of Fresno County and seven other counties, extends from Kern County on the south to San Joaquin County on the north.

Air pollution in the Fresno area (and elsewhere) is the result of substances which are introduced into the air by man's activities and which, directly or indirectly, adversely affect humans, animals, vegetation, and other materials. Air, in its natural state, also contains varying levels of contaminants such as smoke, dust, water vapor, and other impurities caused by natural conditions.

The 1963 Clean Air Act and succeeding amendments and laws have provided for the establishment of mandatory air quality standards, air quality planning programs, and the formation of state and local agencies responsible for the implementation or enforcement of air quality requirements. The State of California Air Resources Board has the general obligation to implement clean air laws and is specifically responsible for controlling mobile emission sources (vehicles). Responsibility for stationary and indirect sources has been delegated to local agencies. Unlike several other areas which have formed unified districts, the counties within the San Joaquin Valley have retained individual authority.

The Environmental Protection Agency (EPA) has established National Ambient Air Quality Standards (NAAQS) for hydrocarbons (HC), nitrogen dioxide (NO₂), photochemical oxidants (OX), carbon monoxide (CO), sulfur dioxide (SO₂), and suspended particulate matter (TSP). California standards apply to the same six pollutants and also sets limits for sulfates, lead, hydrogen sulfide, ethylene, and particulates which reduce visibility. The more stringent standard applies, whether state or federal. The standards establish minimum levels of pollutant concentrations above which adverse effects on health are observed. The period of exposure time is considered equally as important as the level of concentrations.

The Fresno County Air Pollution Control District (APCD) prepared an Air Quality Maintenance Plan (AQMP) and Non-Attainment Area Plan (NAP) in 1979, as Fresno County was not expected to comply with the

air quality standards for ozone, carbon monoxide, and particulates (Table 5) by the mandated deadline of 1985. The AQMP/NAP was updated in 1982, and is referred to as the Fresno Clean Air Plan. The 1985 deadline was subsequently extended by the EPA to December 31, 1988.

Based upon the air quality monitoring required of the APCD, it has been determined that Fresno County will not achieve compliance with the NAAQS for ozone, carbon monoxide and particulates, as required. On June 29, 1987, the EPA announced a sanction on 14 regions, including six in California (of which Fresno County is one). This action prohibits the construction of new uses which would have the potential of emitting 100 tons or more annually of volatile organic compounds (key elements in the formation of ozone) or carbon monoxide. Although it is unlikely that this sanction on large stationary sources, such as industrial plants, will adversely affect the Fresno metropolitan area, further sanctions are possible. These sanctions might include the discontinuance of federal funds for highway and sewer improvements.

Future Air Quality Conditions

The significance of air quality as a serious environmental and economic problem within the Fresno metropolitan area and the larger San Joaquin Valley Air Basin has become increasingly acknowledged by local governments. It is a problem that has the potential to become much worse as population growth continues to occur in the San Joaquin Valley, necessitating area-wide and regional strategies to effectively address the problem. The City of Fresno has previously acknowledged this issue by including an Air Quality Element in the 1984 Fresno General Plan, which was subsequently amended in 1988 with policies emphasizing both local and regional efforts to improve air quality. The EIR (No. 10085) prepared for the 1984 Fresno General Plan indicated that increased air pollution generated by projected metropolitan population and vehicle trip increases would not necessarily be reduced in the Fresno area by a moderately intensive and compact urban development. However, it is recognized that land use patterns, circulation systems, and urban facilities and services can be designed to reduce travel demand or increase its efficiency and, therefore, contribute to reduced air pollution emissions.

Continued urban growth on the metropolitan fringe, including the Woodward Park plan area as provided by the 1984 Fresno General Plan and Woodward Park Community Plan Update, will contribute to cumulative increases in air pollution. Vehicular-generated air pollutant emissions have been projected for the community plan area using the URBEMIS #2 computer program developed by the California Air Resources Board. Table 8 lists the projected amounts (tons per day) of hydrocarbons (HC), carbon monoxide (CO), and oxides of nitrogen (NOx) generated by the year 2020, with total development of the plan area using the 1984 Fresno General Plan concept (130,000 population) and the Advisory Committee's Alternative Plan Update concept (82,000 population). This air quality program applies assumed trip generation rates and average trip lengths to the amounts of various land use categories and does not distinguish land use relationships or street capacities which affect vehicle usage and congestion.

COMPARISON OF FEDERAL AND STATE AIR QUALITY STANDARDS

Pollutant Averaging Time	Federal Standards Primary	Standards Secondary	State Standard	Objective
Ozone 1-hour	0.12 ppm 240 $\mu\text{g}/\text{m}^3$	Same —	0.10 ppm 200 $\mu\text{g}/\text{m}^3$	To prevent eye irritation, breathing difficulties.
Carbon Monoxide 8-hour	9 ppm 10 mg/m^3	Same	9.0 ppm 10 mg/m^3	To prevent carboxyhemo- globin levels greater than 2%.
1-hour	35 ppm 40 mg/m^3	Same	20 ppm 23 mg/m^3	
Nitrogen Dioxide Annual	0.05 ppm 100 $\mu\text{g}/\text{m}^3$	Same	—	To prevent health risk and improve visibility.
1-hour	—	—	0.25 ppm 470 $\mu\text{g}/\text{m}^3$	
Sulfur Dioxide Annual	0.03 ppm 80 $\mu\text{g}/\text{m}^3$	—	—	To prevent increase in respiratory disease, plant damage & odor.
24-hour	0.14 ppm 365 $\mu\text{g}/\text{m}^3$	—	0.05 ppm 131 $\mu\text{g}/\text{m}^3$	
3-hour	—	0.5 ppm 1310 $\mu\text{g}/\text{m}^3$	—	
1-hour	—	—	0.25 ppm 655 $\mu\text{g}/\text{m}^3$	
Sulfates 24-hour	—	—	25 $\mu\text{g}/\text{m}^3$	To improve visibility and prevent health effects.
Particulate Annual Mean	75 $\mu\text{g}/\text{m}^3$	60 $\mu\text{g}/\text{m}^3$	30 $\mu\text{g}/\text{m}^3$	To improve visibility and prevent health effects.
24-hour average	260 $\mu\text{g}/\text{m}^3$	150 $\mu\text{g}/\text{m}^3$	PM ₁₀ * 50 $\mu\text{g}/\text{m}^3$ PM _{2.5} *	
Visibility Reducing Particles	State Standard: One observation. In sufficient amount to reduce the prevailing visibility to less than ten miles when the relative humidity is less than 70%.			
Lead 30-day Calendar quarter	— 1.5 $\mu\text{g}/\text{m}^3$	— Same	1.5 $\mu\text{g}/\text{m}^3$ —	To prevent health problems.
Hydrogen Sulfide 1-hour	—	—	0.03 ppm 42 $\mu\text{g}/\text{m}^3$	To prevent odor problems.
Vinyl Chloride (Chloroethene) 24-hour	—	—	0.010 ppm 26 $\mu\text{g}/\text{m}^3$	To prevent health problems
Ethylene 8-hour	—	—	0.1 ppm	To prevent plant damage.
1-hour	—	—	0.5 ppm	
* PM ₁₀ = Particulate matter ten microns or less in size.				

Source: Bay Area Quality Management District,
Air Quality Handbook, 1985-1986.
Earth Metrics Incorporated, 1987

TABLE EIR-6

1988 ESTIMATED EMISSION INVENTORY

FRESNO COUNTY

Source Category	Pollutants						(Tons/Day)	
	NOX	CO	ROG	TOG	PM ²	PM ¹⁰ ³	TOTAL	%
<u>Stationary Sources</u>								
Fuel Combustion	23.18	5.01	0.60	0.99	3.96	3.53	37.27	2.9
Waste Burning	0.34	5.62	1.00	2.59	1.02	1.01	11.58	0.9
Solvent Use	0	0	21.09	22.93	0	0	44.02	3.5
Petroleum Process, Storage & Transfer	0	0	46.52	66.47	0.48	0.19	113.66	9.0
Industrial Processes	6.15	3.89	15.00	18.76	10.52	5.59	59.91	4.7
Miscellaneous Process	<u>0.15</u>	<u>6.83</u>	<u>14.86</u>	<u>236.54</u> ⁴	<u>225.09</u> ⁵	<u>113.26</u>	<u>596.73</u>	<u>47.0</u>
Total Stationary Sources	29.82	21.35	99.07	348.28	241.07	123.58	863.17	68.0
<u>Mobile Sources</u>								
On Road Vehicles	38.84	186.95	22.31	24.14	6.28	4.16	282.68	22.3
Other Mobile	<u>22.94</u>	<u>72.48</u>	<u>10.88</u>	<u>11.27</u>	<u>3.10</u>	<u>2.98</u>	<u>123.65</u>	<u>9.7</u>
Total Mobile Sources	61.78	259.43	33.19	35.41	9.38	7.14	406.33	32.0
Total Fresno County	91.60	280.78	132.26	383.69	250.45	130.72	1,269.5	100.00

1. Includes farming operations, on and off-road dust, waste disposal and unplanned fires.

2. Includes particulate matter with an aerodynamic diameter over 10 microns.

3. Includes particulate matter with an aerodynamic diameter less 10 microns.

4. Nearly all (95%) of these TOG emission are from waste disposal.

5. These particulate emissions are primarily from Farming Operations (36%), Road Dust (54%), and Construction Demolition (10%).

TABLE EIR-7

Fresno County Monitored Air Quality Data

	<u>Five Points</u>				<u>First/Olive</u>		<u>CSUF</u>		
	<u>Ozone (.12 ppm = 1 Hr. Standard)</u>								
<u>YEAR</u>	<u>High</u>	<u>2nd High</u>	<u># Days*</u>	<u>High</u>	<u>2nd High</u>	<u># Days</u>	<u>High</u>	<u>2nd High</u>	<u># Days</u>
1976	.11	.11	0	.18	.17	7	NA	NA	NA
1977	.12	.12	0	.16	.16	5	NA	NA	NA
1978	.09	.09	0	.15	.15	9	.18	.18	25
1979	.08	.08	0	.17	.15	7	.18	.18	32
1980	.10	.09	0	.17	.17	14	.21	.20	43
1981	.09	.09	0	.14	.14	5	.18	.17	30
1982	.09	.08	0	.13	.12	1	.18	.16	15
1983	.11	.10	0	.14	.13	2	.16	.15	18
1984	NA	NA	NA	.11	.11	6	.16	.15	26
1985	NA	NA	NA	.16	.15	7	.16	.16	19
1986	NA	NA	NA	.15	.14	6	.17	.15	24

Carbon Monoxide (9ppm = 8 Hr. Standard)									
YEAR	High	2nd High	# Days*	High	2nd High	# Days	High	2nd High	# Days
1976	4.8	4.0	0	27.3	19.5	52	NA	NA	NA
1977	2.8	2.6	0	17.8	16.0	35	NA	NA	NA
1978	2.8	1.9	0	15.8	12.1	25	7.4	7.0	0
1979	1.9	1.8	0	21.9	16.1	13	4.4	4.0	0
1980	1.1	1.1	0	15.5	14.9	26	7.5	7.4	0
1981	1.0	1.0	0	13.6	12.0	9	6.0	5.0	0
1982	2.3	1.5	0	14.3	9.9	3	11.5	9.8	2
1983	1.0	1.0	0	13.1	11.9	6	6.0	5.4	0
1984	NA	NA	NA	21.0	20.0	1	14.0	11.0	0
1985	NA	NA	NA	10.7	10.6	6	7.5	6.3	0
1986	NA	.NA	NA	16.3	15.6	12	7.4	5.8	0

Nitrogen Dioxide (.25 ppm. = 1 Hr. Standard)									
YEAR	DATE	High	2nd High	# Days*	High	2nd High	# Days	High	2nd High
1976	DATE	.18	.18	0	NA	NA	NA	NA	NA
1977	NOT	.14	.14	0	NA	NA	NA	NA	NA
1978	AVAILABLE	.18	.18	0	NA	NA	NA	NA	NA
1979	NA	NA	NA	.16	.15	0	NA	NA	NA
1980	.09	.06	0	.18	.17	0	NA	NA	NA
1981	NA	NA	NA	.21	.19	0	NA	NA	NA
1982	.05	.04	0	.13	.11	0	NA	NA	NA
1983	.03	.03	0	.15	.12	0	NA	NA	NA
1984	NA	NA	NA	.15	.12	0	NA	NA	NA
1985	NA	NA	NA	.15	.14	0	.11	.10	0
1986	NA	NA	NA	.19	.17	0	.10	.09	0

Total Suspended Particulate (100 ug/m ³ = Standard)									
YEAR	High	2nd High	# Days*	High	2nd High	# Days	High	2nd High	# Days
1976	414	241	27	339	287	42	NA	NA	NA
1977	301	240	32	272	255	57	NA	NA	NA
1978	267	203	30	538	517	42	507	265	28
1979	555	249	30	366	249	44	245	214	27
1980	364	343	22	332	321	32	356	277	22
1981	255	249	18	426	199	38	190	181	24
1982	172	171	18	176	173	38	162	155	20
1983	191	188	36	192	172	58	126	119	21
1984	163	159	15	232	195	31	249	154	17
1985	232	219	21	301	208	26	390	146	13
1986	NA	NA	NA	207	207	27	NA	NA	NA

Particulate Matter - 10 Micron (150 ug/m ³ = 24 hr. Standard)									
YEAR	High	2nd High	# Days*	High	2nd High	# Days	High	2nd High	# Days
1986	169	160	4	175	158	2	130	117	0

* Above Standard

ESTIMATED VEHICLE EMITTED AIR POLLUTANTS

Pollutants	Fresno Co. Yr - 1988	Woodward Park Area Yr - 1990	Woodward Park Area Committee Recommendation Yr-2020	Woodward Park Area Committee Recommendation w/Modifications	Woodward Park Area General Plan Densities Yr-2020
	T/D	T/D	T/D % Above W.P.A. '90	T/D % Above W.P.A. '90	T/D % Above W.P.A. '90
HC	24.14	1.39	3.73 168%	4.37 214%	4.9 253%
CO	186.95	13.79	44.71 242%	52.07 278%	59.42 330%
NOX	38.84	1.34	4.26 218%	5.05 277%	5.5 310%

T/D - Tons per day

HC - Hydrocarbons

CO - Carbon Monoxide

NOX - Oxides of Nitrogen

WPA '90 - Woodward Park Area Year 1990

1. Fresno County Air Pollution Control District

2. City of Fresno, URBEMIS #2 Computer Program developed by California air Resources Board with EMFAC7 emission factors.

The Committee-recommended Plan Update would generate 31 percent less hydrocarbons, 33 percent less carbon monoxide, and 29 percent less nitrogen oxides than the 1984 General Plan concept.

Impacts

- o Increased air pollution (HC, CO and NOx) due to increased vehicle traffic and congestion.
- o Generation of particulate pollution (PM₁₀) from sand and gravel extraction, agricultural activities, fallow ground, and short periods of construction activities.
- o Increased air pollution due to the combustion of fuels for space heating purposes and other urban activities using materials and gases which release air pollutants.

Mitigation Measures

Measures and strategies necessary to attain air quality standards must be region-wide in scope in order to effectively address the activities which generate the air pollutants. However, some of these measures are applicable to the smaller community areas and may be implemented through a community plan. Although it appears that automobile travel will remain the predominate mode of transportation, several strategies are established by the 1984 Fresno General Plan in an effort to reduce vehicle miles traveled and congestion.

The following policies/implementative strategies of the 1984 Fresno General Plan Air Quality Element are appropriate mitigation measures to be considered for incorporation within the community plan's land use and circulation concept, and implementation strategies.

- o Develop and incorporate air quality maintenance considerations in the preparation of community and specific plans and in the review of land use and development proposals.
- o Modify land use regulations and related processes to provide for the integration of compatible land uses.
- o Integrate compatible land uses and concentrate development along major streets and near major employment areas to reduce vehicle miles traveled.
- o Develop the means to obtain or use land for on-site bus turning and parking areas with attendant employee and passenger facilities.
- o Measures requiring additional study:
 - a. Evaluate the potential content and potential application of a "transportation ordinance" to provide for comprehensive implementation of plans, policies, and measures for the reduction of air pollution from mobile sources.

- b. Evaluate the feasibility for a "transportation corridor" that would enhance investment in the area generally between Blackstone Avenue and State 41 Freeway, extending from Divisadero northerly to Audubon Drive for the purpose of reducing vehicle miles traveled.
- o Continue to implement the following air quality maintenance policies and implementation strategy measures providing for broad scale control and reduction of air pollution:
 - a. Traffic Flow - Ongoing improvement of traffic signals to reduce vehicle emissions from excessive automobile engine idling (optimized signal timing, interconnected signals, traffic actuated signals, computer-based controls, channel intersections, additional turn lanes).
 - b. Transit - On-site (at major shopping centers, other locations) bus parking and loading lanes with passenger and driver facilities to reduce vehicle miles traveled, engine idling, and improved traffic flow.
 - c. Bicycle Alternative - Bicycle lanes, bikeway design and planning with attendant safety and convenience facilities to reduce vehicle miles traveled.
 - d. 1984 Fresno General Plan, planning policies, and related land use regulations.
 - (1) Contiguous Urban Expansion - To reduce vehicle miles traveled.
 - (2) Urban Infill - To reduce vehicle miles traveled.
 - (3) Mixed Land Use - Utilizes Local Planning and Procedures Ordinance to achieve mixed residential, commercial, and office uses; reduces vehicle miles traveled.
 - (4) Density Transfer - Utilizes Local Planning and Procedures Ordinance to reallocate dwelling unit densities in selected areas; reduces vehicle miles traveled.

NOISE

Noise is defined in the context of this analysis as unwanted sound; a subjective reaction to a physical phenomenon. Its effects on people can range from pleasure to annoyance, and include an inhibition of a sense of well-being, sleep disturbance, interference with conservation and activities, and even physical damage resulting in hearing impairment.

An updated noise element was prepared, and its findings, goals and policies incorporated into the 1984 Fresno General Plan. This element responded to state planning law (Government Code Section

65302g) and standards (Title 25) by providing: 1) noise measurements and projections; 2) noise criteria and mitigation measures; and, 3) noise-sensitive land use compatibility planning.

When considering noise in the planning process, it is recognized as achieving three components: a source; a means of transmission; and, a receiver. Sound is a function of pressure variation in the air occurring at a frequency (at least 20 times per second) that the human ear can detect. The magnitude of noise is commonly measured in decibels (dB), using the threshold of human hearing as a point of reference (0dB) and increasing logarithmically. Thus, a million-fold increase from 0dB is expressed as 120dB.

There are two composite noise descriptors in common use today, the Ldn and CNEL. The Ldn is an average day and night sound level based upon an average hourly sound level over a 24-hour day with a +10dB weighting applied to nighttime (2200 hours to 0700 hours) sound levels. It is used by the noise element to quantify noise conditions and define maximum appropriate noise exposure levels. The CNEL scale was developed for the California Airport Noise Regulations for planning purposes. The CNEL and Ldn descriptions are similar enough to be interchangeable.

Different land uses have varying degrees of sensitivity to noise, and the time and type of noise, can alter the impact of noise on land uses. The most sensitive land uses include residential dwellings, schools, hospitals, and churches. Moderately sensitive land uses include motels, commercial, and office uses. Agriculture, parking facilities, warehouses, and industrial uses are considered to be land uses that are largely insensitive to noise.

The noise element defines all areas subjected to Ldn/CNEL noise levels exceeding 60dB as noise-impacted areas. New noise-sensitive uses shall not be permitted within the noise impacted areas unless mitigative measures are implemented to reduce noise exposure to levels which do not exceed Ldn 60dB for exterior activity areas and Ldn 45dB for interior living areas.

Future Conditions

The anticipated future major noise sources within the Woodward community are roadway (vehicular) and commercial/industrial activities, as described below:

1. Roadways - this includes Freeway 41, the Herndon expressway, arterial, and collector streets. Roadway noise levels are a function of automobile and truck size, vehicle speed, and volume. For example, levels at Freeway 41 have been measured at 70dB at 50 feet from the road. This level is considered comparable to the top end of audible human speech.
2. Commercial/Industrial - sand and gravel extraction and processing, agricultural processing, and shopping centers are examples of these noise sources.

As growth and development occur, noise levels associated with increased vehicle traffic volume and intensified urban activi-

ties will also increase. The noise level contour analysis in the General Plan Noise Element takes this into account and makes roadway noise contour projections for the year 2000. The 60dB contour projected for arterial streets, such as First Street and Cedar Avenue, extends approximately 180 feet out from the street right-of-way.

The General Plan Noise Element describes noise reduction measures which can be implemented, such as setbacks, barriers, site and building design, outdoor landscaping, and interior noise absorbing materials. Policies are also established to achieve noise compatible land uses and environments. The Woodward Park Community Plan provides for land use arrangements and noise policies consistent with the General Plan.

In addition to these policies, there is existing legislation to limit noise exposures. The noise ordinance of the City of Fresno has established ambient noise levels for residential, commercial, and industrial land uses and controls the exposure of the public to annoying or harmful levels of noise through monitoring and regulation of noise sources.

Impacts

- o Potential exposure of residential uses along major streets (freeways, expressways, arterials and collectors) to noise levels exceeding the 60 Ldn standard of the General Plan Noise Element.
- o Exposure of areas within or near the San Joaquin Riverbottom to increased noise due to additional sand and gravel recovery operations.

Mitigation Measures

- o Implement circulation policies/implementation measures of the Woodward Park Community Plan which will reduce exposure to vehicular-generated noise (Policies 3-3.4, 3-3.6, 3-3.7, 3-3.8, 3-4.4, 3-4.5, 3-4.6 and 3-4.10).
- o Implement noise policies/implementation measures of the Woodward Park Community Plan (Policies 8-3.1, 8-3.2, 8-3.4, 8-3.5 and 8-3.6).
- o Require that all fences and walls constructed for residential uses which back or side onto major streets without a front-age road meet the standards of Fresno Municipal Code Section 12-306-N-19.

ENERGY CONSUMPTION

Energy is used to conduct almost every aspect of urban life, with transportation estimated to be the largest energy-consumptive activity in the metropolitan area using 35.5 percent of the area's energy demand. Residential uses follow with 34.2 percent and commercial activities with 21.1 percent of the area's energy usage. Within the metropolitan area, it was estimated that in 1978 approximately 47.4 percent of energy usage was supplied by petroleum; 33.5 percent from natural gas; and, 15.5 percent from hydroelectric sources. The development of the Woodward Park community will commit energy resources to the construction and maintenance of new

buildings and public facilities, as well as sustaining the subsequent urban activities they are intended to accommodate.

The Energy Element of the 1984 Fresno General Plan addresses four areas of energy conservation which include: municipal operations; new development standards; land use and transportation; and, retrofit (insulation, co-generation). To the extent that the plan concept, goals, and policies of the plan update advocate an efficient relationship of land uses, transportation, and public facilities, future energy consumption rates may be reduced. In addition, the City of Fresno had implemented State Energy Conservation Building Codes and solar access protection measures and has adopted enhanced landscaping standards for parking areas in order to promote passive energy conservation.

Impacts

- o Increased energy consumption associated with expanded urban development and related activities.

Mitigation Measures

- o Implement the objectives and policies of the 1984 Fresno General Plan Energy Conservation Element.

GEOLOGIC, SEISMIC, SOIL AND AGRICULTURAL LAND

The geologic, seismic, and soil conditions of the metropolitan area in general, and more specifically the Woodward Park Community Plan area, have been examined in detail by previous plans, project proposals, and accompanying EIR's. These sources, which are cited in the Appendix, are incorporated herein by reference and should be referred to for further information. The Fresno metropolitan area is located near the midpoint of the San Joaquin Valley, which is the south half or subbasin of the great Central Valley geomorphic province. The Woodward Park Community Plan area is the northeast fringe of the Fresno metropolitan area, which is located on young alluvial fans formed from material derived from the Sierra Nevada mountain range to the east. Along the northeast boundary of the community is the San Joaquin River, which has cut a 60 to 100-foot deep and one-quarter to three-mile wide river channel.

The metropolitan area has been classified as seismic zone V-1 by the Five-County Seismic Safety Element (Envicom, 1974), characterized by a relatively thick section of sedimentary rock overlaying a granitic base. Exposure to primary earthquake-caused hazards, including ground shaking and rupture, are considered low. Secondary hazards such as landslides, subsidence, and liquefaction are minimal to moderate. The San Joaquin River bluff is identified as having the greatest potential for geologic hazards due to steep slopes and soil types.

The Soil Conservation Service (SCS) of the United States Department of Agricultural (USDA), in the Soil Survey of the Eastern Fresno Area (1971), identifies the soil in the plan area as being predomi-

nantly of the San Joaquin-Exeter-Ramona Association, which is a generally well-drained soil of low alluvial terraces. Other soil associations running parallel to the San Joaquin River across the northwest portion of the plan area include Grangeville-Chino, Hanford-Tujunga, and Hanford-Hesperia which are of recent young alluvial fan origin. Much of the planning area has an underlying cemented silica-iron hardpan layer at a moderate depth.

The importance of agriculture in the San Joaquin Valley is well-known. The area is one of the highest in productivity in the nation due to soil quality, water availability, and suitable climate. Agriculture is a dominant factor in the economy of Fresno County and contributes to the region's rural character and quality of life. Since 1950, the County has consistently ranked first among the agricultural areas of the nation in value of production. Approximately 1,700 acres of land or 43 percent of the Woodward Park Community Plan area is "prime farmland" - land classified as excellent farmland capable of producing excellent crop yields. The area also includes "farmlands of statewide importance," which is land that has a good combination of physical and chemical characteristics for producing certain types of food and feed and is available for these uses (see Figure 6). A considerable amount of this land is still in agricultural production, primarily with orchards and row crops.

Sprawling urbanization or unregulated urban expansion are serious threats to this natural resource and should be avoided within practical limits. In the past, "leap frog" development has occurred with urbanization bypassing agricultural uses. In some cases, this has hampered or precluded optimal crop production due to urban agricultural conflicts such as vandalism or farm-generated dust, noise, and odors. Often farmland may be purchased for its possible speculative gain rather than for its continued agricultural production. Attention should be directed toward avoiding urban sprawl and possible premature divestment of farming operations where future growth is anticipated, but development may not occur for several years.

The loss of prime farmland soils is almost entirely irreversible once converted to urban use. An opportunity to retard the premature conversion of farmland is provided through the California Land Conservation Act (Williamson Act). Owners of agricultural land within designated agricultural preserve areas may enter into contracts to obtain preferential tax assessments on the land if the owner agrees to hold the land in agricultural use for not less than 10 years, and up to 20 years in some circumstances. The contract is automatically renewed each year, unless terminated by request of the landowner, who must wait the succeeding nine (or 19) years to convert the land to another use. The Woodward Park Community Plan area has approximately 727 acres currently under agricultural preserve contracts (Exhibit 7). There are requests on file to not renew some of these contracts, but by 1996 there will still remain 648 acres under contract.

FIGURE EIR-6

AGRICULTURAL LANDS



PRIME FARMLAND



STATEWIDE IMPORTANT FARMLAND

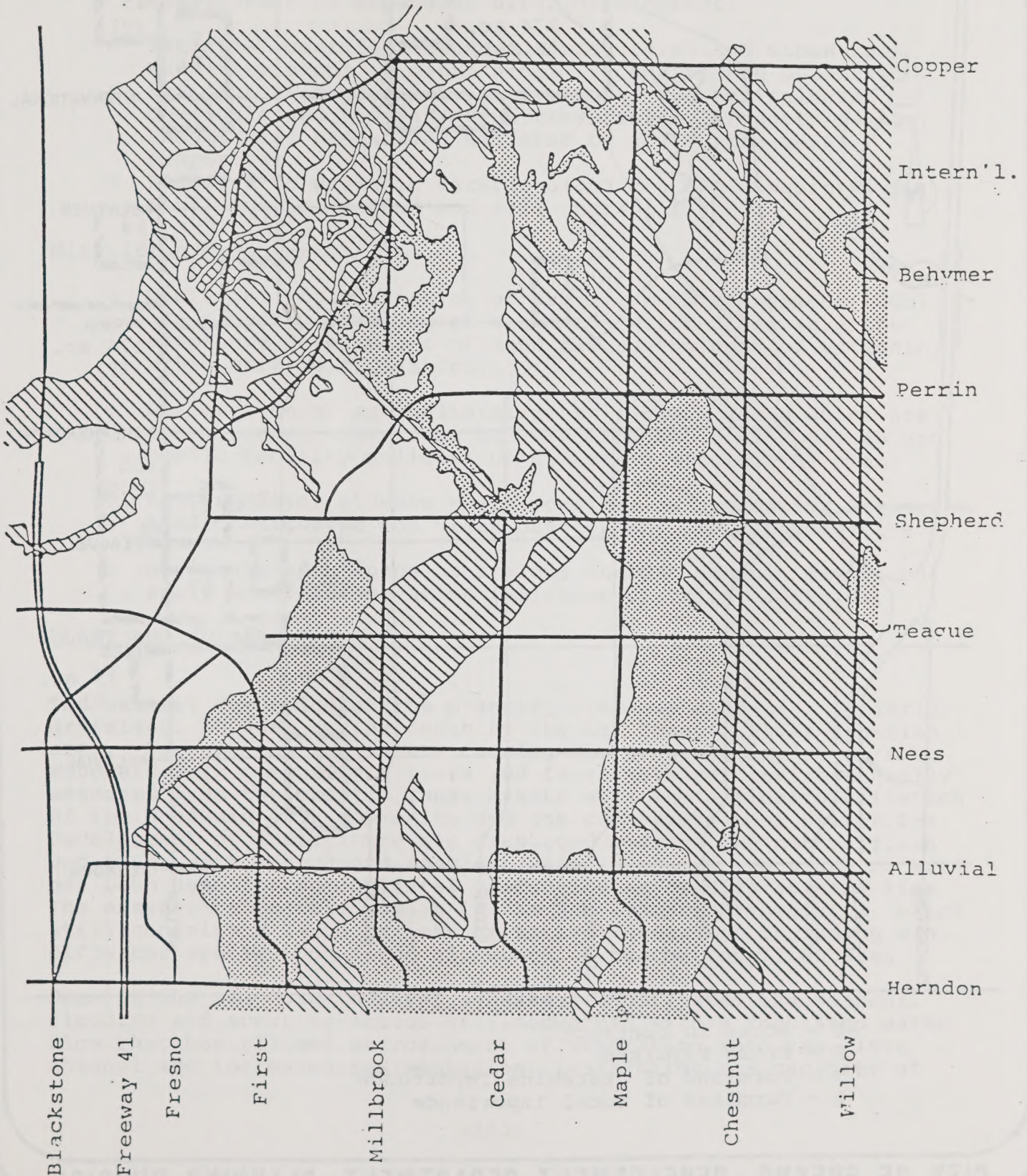
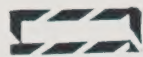
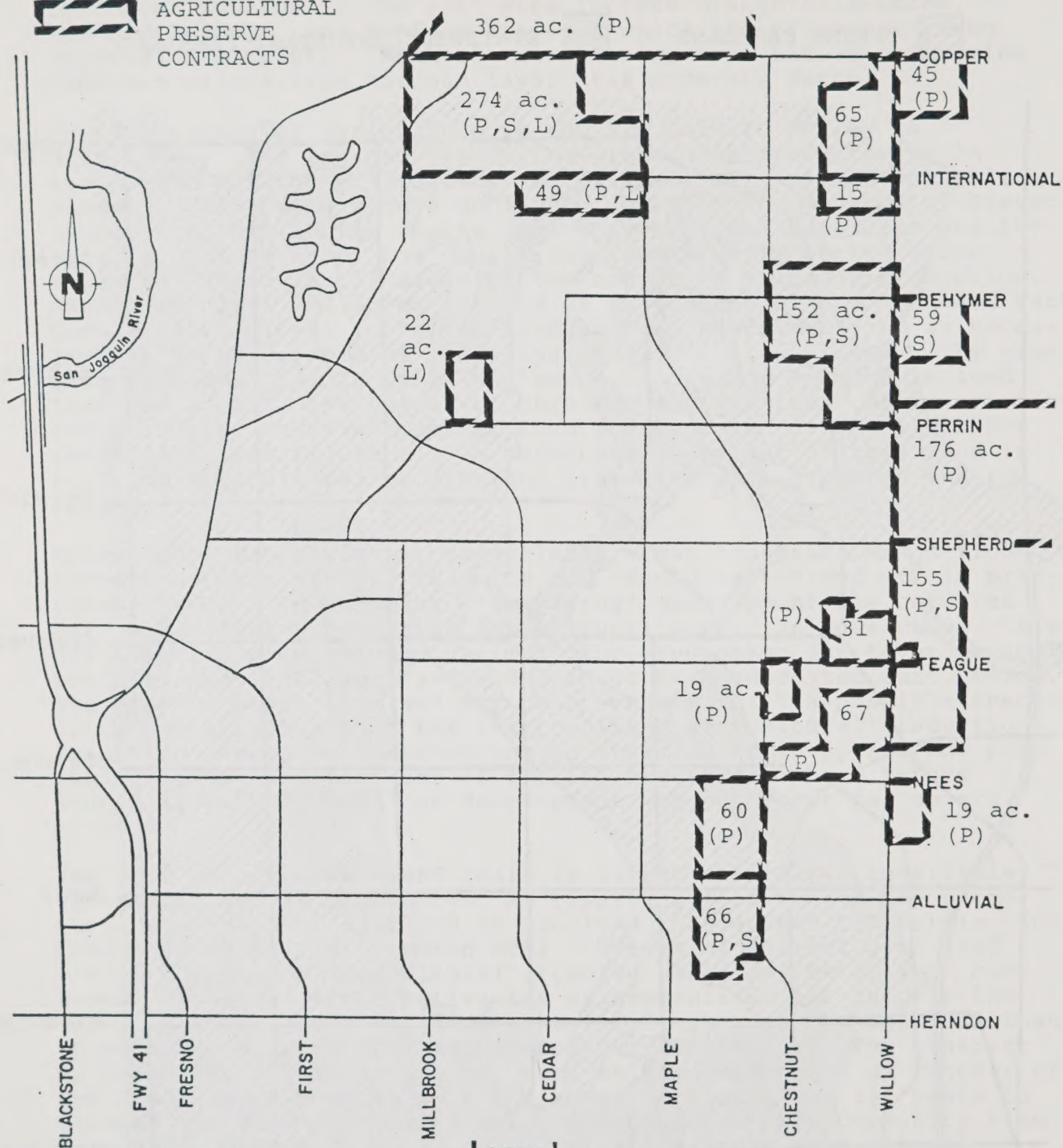


FIGURE EIR-7 Woodward Park Community Planning Area



AGRICULTURAL
PRESERVE
CONTRACTS



Legend

- 66 - Acres in Contract
- P - Prime Farmland
- S - Farmland of Statewide Importance
- L - Farmland of Local Importance

Impacts

- o Conversion of agricultural land identified as "prime" or "of statewide importance" to nonagricultural uses. This conversion is considered a permanent and unavoidable consequence of expanding urban development.
- o Potential conflicts between agricultural and urban uses when they occur in close proximity due to the potential residential exposure to noise, dust, and agricultural chemicals and the potential trespassing, property damage, and reduced production suffered by the agricultural properties.
- o Exposure to geologic hazards along the San Joaquin River bluff due to erosion and soil instability.

Mitigation Measures

- o Continued implementation of urban growth management (UGM) and property development standards which discourage the premature development of land due to the cost of extending urban service facilities.
- o Designation of agricultural/urban reserve areas which are converted to urban uses only in accordance with growth and public facility policies of the staff alternative plan.
- o Utilize major streets where possible as boundaries between areas designated for urban development and urban reserve.
- o Designate open space uses along the San Joaquin River and apply Bluff Preservation (BP) Zone District standards.

PLANT AND ANIMAL LIFE

The natural condition of the planning area was that of a semiarid grassland, bounded on the north by the San Joaquin River riparian area. Perhaps the two events causing the greatest impact on the Woodward Park community's flora and fauna were not environmentally assessed from the start. These events were the agriculturalization of the Woodward Park community and the construction of Friant Dam. Development of agriculture has displaced most of the native flora and fauna with introduced species. Almost the entire planning area has been used for agricultural production or grazing at some time. The exceptions to this remain in the San Joaquin Riverbottom, which still contains a large variety of native vegetation including many different species not found elsewhere in the metropolitan area.

Damming the San Joaquin River at Friant substituted the seasonal flooding and scouring action of floodwaters with a regulated water flow that has allowed encroachment of vegetation into the river channel and increased sedimentation, restricting the capacity of

this waterway. The combination of agricultural activity and regulated water flow substantially reduced the natural riparian habitat.

A third activity affecting habitat is the mining of sand and gravel from the riverbottom area. Much of this mining occurs in areas previously converted to agricultural use, although some may occur along the river's edge. This extraction activity reduces the elevation of riverbottom land, leaving permanent ponds and levies which can provide water and riparian habitat with the implementation of restoration plans.

The present animal population of the community includes native and introduced species that have adapted to the man-made environment. A partial list of the wildlife species identified in the area follows:

Birds

Red-tailed hawk (Buteo jamaicensis)
Sparrow hawk (Falco sparverius)
Barn owl (Tyto alba)
Turkey vulture (Cathartes aura)
Horned lark (Eremophila alpestris)
Lark sparrow (Charadrius vociferous)
Goldfinch (species)
Killdeer (Charadrius vociferous)
Red-winged blackbird (Agelaius phoeniceus)
Mourning dove (Zenaidura macroura)
Migratory waterfowl

Mammals

Jackrabbit (Lepus californicus)
Beechi ground squirrel (Citellus beecheyi)
Gray fox (Urocyon cinercoargenteus)
Long-tailed weasel (Mustrela frenata)
Striped skunk (Mephitis mephitis)
Common opossum (Didelphis marsupialis)
Botta pocket gopher (Thamomys bottae)
Field mouse

Reptiles

Common king snake (Lampropeltis getulus)
Garter snake (hamnophis species)
Gopher snake (Pituophis catenifer)
Western rattlesnake (Crotalus viridis)
Gilbert's skink (Eumeces gilberti)
Western fence lizard (Sceloporus undulatus)

Amphibians

Western spadefoot toad (Scaphiopus hammondi)
California slender salamander (Batrachoseps attenuatus)

A complete list can be found in the San Joaquin River Area Reconnaissance Study (City of Fresno, County of Fresno, County of Madera [1986]).

The State of California has identified the locations of 13 special plants and wildlife needing protection in the San Joaquin River area, between Friant Dam and Highway 99. Within the Woodward Park community, four of these plant and wildlife locations exist. They are:

1. San Joaquin Valley Orcuttia Grass - a plant associated with vernal pools that is classified as a Category 1 candidate for federal listing. It is listed as endangered by the State, and is identified as "Rare and Endangered in California and Elsewhere" by the California Native Plant Society. It was located by the Native Plant Society near Blackstone and Audubon Drive and may exist elsewhere.
2. San Joaquin Pocket Mouse - a species classified as being either uncommon and declining or peripheral and endangered in California. The species is a Category 2 candidate for federal listing.
3. California Yellow Billed Cuckoo - a bird classified as a Category 2 candidate for federal listing and is listed in California as threatened. It is listed in the Natural Diversity Data Base (State Department of Fish and Game, December 13, 1985) as a rare and threatened species. Comments on the field report stated that these birds are historically uncommon, but have been known to nest in this area.
4. Northern Claypan Vernal Pool - a natural community with a high percentage of exotic plants, such as orcuttia grass or fleshy owl's clover. Identified by the State as important to rare and threatened species or a very rare, endangered or threatened subspecies. These pools were identified in the riverbottom and nonriverbottom area in the vicinity of Woodward Regional Park.

Other federally-listed endangered species associated with the San Joaquin River area include:

1. Blunt-nosed Leopard Lizard.
2. Western Spadefoot Toad.
3. California Tiger Salamander.
4. Fresno Kangaroo Rat.
5. Giant Garter Snake.

The significance of these and other special plants and wildlife is due, in part, to their geographical limitations and the rate of disappearance of the associated riparian habitats. Existing federal and state regulations provide for the inventory of endangered, threatened, and rare flora and fauna. Levels of protection,

however, are not consistent. The Endangered Species Preservation Act of 1966 makes it a federal offense to remove certain threatened or endangered wildlife. State law, on the other hand, seeks to protect these species by encouragement and cooperation of the property owner rather than established penalties. The existence of these unique species has a substantial aesthetic, natural, and educational value to Californians and insures that the remaining native environment contains a rich and diverse population of flora and fauna. The protection of these communities is important to our continuing understanding of the world. Efforts to protect and preserve these significant plants and animals are appropriate.

Future Conditions

The Woodward Park Community Plan facilitates the continued process of urbanization which may result in the displacement of some of the existing vegetation and wildlife. However, the man-made environment resulting from the plan may also contain a substantial amount of vegetation and wildlife. The relatively low density of residential development occurring within the Woodward Park community tends to encourage the extensive planting and landscaping of ornamental vegetation which offers some habitat for many species of wildlife suited to man's environment.

The Woodward Regional Park and bird sanctuary provides a man-made habitat which will remain as the area urbanizes. In addition, the plan designates the entire riverbottom area for open space use. Although no urban uses are designated within the riverbottom, agricultural and sand/gravel extraction activities may alter the natural habitat characteristics. Future uses within the riverbottom are expected to be examined through a San Joaquin River Parkway and Environs Plan. A draft of this plan is being prepared by the San Joaquin River Trust which has been formed for the purpose of preserving the river's valuable riparian environment and providing public access where appropriate.

The value of flora and fauna, particularly those species considered to be native, unique or sensitive, has been recognized by the objectives and policies of the 1984 Fresno General Plan to protect the habitat of these species. These objectives advocate the preservation of open space areas to protect and enhance the scenic, recreational, vegetative, and wildlife resources of the San Joaquin Riverbottom and bluff. Fourteen policies are identified to implement these objectives, including the use of open space easements and appropriate zoning to promote preservation of habitat and avoid projects that may adversely affect endangered wildlife and vegetation.

Through deliberate implementation of objectives regarding endangered or unique plant and animal species of the 1984 Fresno General Plan and the continued designation of the San Joaquin River area for open space land uses, the Woodward Park Community Plan Update is not expected to have a significant effect on the area's flora and fauna.

Impacts

- o Continued urban development will decrease open space, agricultural and rural areas, and increase noise, light and glare, vehicular traffic, and other human activities which may further reduce wildlife populations within the community.
- o Activities which may occur within the open space designation of the riverbottom, such as agriculture, mining, and recreation, could reduce wildlife habitat.

Mitigation Measures

- o Implement open space and conservation policies/implementation measures of the Woodward Park Community Plan Update to preserve the natural scenic and recreational resources of the San Joaquin River environs (Policies 2-2.1 through 2-2.12 and 2-3.8 through 2-3.11).

PARK AND OPEN SPACE AREAS

The planning area will be served by the Fresno City Parks, Recreation, and Community Services Department (Parks Division) which manages and maintains City-owned parks and open space areas, operates organized recreation programs, and provides other cultural, leisure or community service activities. Presently developed parks within the community plan area include Woodward Regional Park and the neighborhood park at Millbrook and Cole Avenues. A neighborhood park site has also been acquired, but not yet developed, on the south side of Alluvial Avenue, between Fresno and First Streets. No community parks presently exist within the planning area.

Neighborhood parks are generally five to ten acres in size, are often developed adjacent to schools, and usually include landscaping, playfields, several lighted tennis or multipurpose courts, and restroom-equipment storage buildings. Community parks are generally 15 to 20 acres in size and, in addition to neighborhood park facilities, are intended to include a gymnasium and multipurpose buildings. Regional parks are substantially larger and have large picnic or special facilities which attract visitors from throughout the metropolitan area.

The Urban Growth Management (UGM) process requires the payment of a park fee at the time of property development to provide for the acquisition and partial improvement of neighborhood parks. The UGM fees, however, are not assessed for development of community or regional park facilities. These facilities have been established in the past through general fund allocations, state or federal bond and grant funds, and private donations. The draft Parks and Recreation Master Plan suggests that local bond measures and special district programs be pursued to finance community park improvements as well as regional park facilities.

Future Conditions

The interim Community Plan Update proposes to implement the open space acreage per 1,000 population ratio standard proposed by the Master Plan for Parks and Recreation (initiated for public review on January 3, 1989). This standard would provide a total 3.0 acres/1,000 people consisting of .75/1,000 for neighborhood parks, .25/1,000 for community parks, and 2.0/1,000 for regional parks.

Three new neighborhood park sites are designated in the east half of the planning area by the Woodward Park Community Plan Update in accordance with the Parks Master Plan. These sites, together with the designated elementary schools and open space bike path/multi-purpose trails, will provide adequate opportunities for neighborhood open space and recreation facilities. In addition, the Parks Master Plan proposes that the neighborhood park site on Alluvial Avenue, between Fresno and First Streets, be developed together with the adjacent ponding basin with community recreation facilities.

The community plan provides for the establishment of a network of public open space and landscaped areas including major street buffers, median islands, pedestrian/bikeway and equestrian trails, and vista points. These facilities may necessitate public maintenance in those instances when the property owner does not have direct access to the landscaped area or maintenance by individual property owners would be detrimental to the integrity of the landscaped area. A landscaped maintenance district has been formed to provide maintenance when appropriate, with individual property owners assessed for their proportionate share of the benefit derived from these common landscaped areas.

In addition to unfunded park improvement needs throughout the metropolitan area, the Parks Division has had to reduce the level of maintenance provided to parks and other public landscaped areas due to budget constraints. The Department has expressed a reluctance to construct new parks if reliable maintenance funding cannot be anticipated. City-wide special district funding for maintenance of public landscaping and other open space areas has been preliminarily considered by the City Council in the past. However, because there was little apparent public support for this concept, it was not further pursued.

The San Joaquin Riverbottom is designated for multiuse open space purposes which could accommodate future public access and recreation areas. The designation, implementation, and maintenance of such facilities, however, will be determined through the San Joaquin

River Parkway planning process.

Impacts

- o Increased demand for public parks and recreation facilities.
- o Designation of appropriate future park sites that, upon

development, will attract vehicle traffic and accommodate recreational activities which could be considered nuisances by adjoining properties.

- o Implementation of multipurpose pedestrian/bikeway paths, equestrian trails, and vista points will allow public access which could cause conflicts with nearby properties.
- o Designation of the San Joaquin Riverbottom as appropriate for recreation/open space uses potentially accommodating outdoor recreational improvements, increased access to riverbottom areas, and resource recovery such as sand and gravel mining.

Mitigation Measures

- o Designation of future park sites by the plan to serve additional plan area population in accordance with applicable policies.
- o Implement public parks, pathways, trails, and vista points in accordance with applicable policies and standards which provide public review and comment opportunities.
- o Continued implementation of the UGM process which requires payment of fees upon development of property at an accelerated rate in order to provide neighborhood park facilities in a timely manner.
- o Implement a plan policy which proposes that the City commit to developing a neighborhood park within two years of the time that 95 percent of the UGM service area funds are collected.
- o Adopt a San Joaquin River Parkway Plan to guide all recreation activities within the riverbottom area in a manner compatible with the resources and constraints of this valuable natural asset.
- o Implement the Fresno General Plan Mineral Resources Element which established policies for the preservation and utilization of sand and gravel resources, and establishes criteria and standards to reduce impacts and potential land use conflicts.

FLOOD CONTROL AND URBAN STORM WATER DRAINAGE

Flooding occurs within the Fresno metropolitan area due to storm water runoff within urbanized areas or the overflow of streams and channels draining the Sierra Nevada foothills. Due to the metropolitan area's relatively flat topography, essentially all urban development requires construction of a storm water drainage system in order to protect property and avoid disruption of urban activities. Protection of property from naturally occurring flood water flows requires either the avoidance of development within the flood

prone areas or the construction of flood control structures to restrain the overflow of water onto flood prone areas.

In response to the local desire for comprehensive area-wide flood control planning and implementation, the Fresno Metropolitan Flood Control District (FMFCD) was created to provide flood control, urban storm water drainage, water conservation, and recreation services to the Fresno-Clovis area. Its sphere of influence essentially extends from Chateau Fresno Avenue on the west to the lower Sierras on the east, between the San Joaquin and Kings Rivers. While all urbanization within the Woodward Park community will be subject to the implementation of storm water drainage standards, only small portions are subject to floodplain management limitations.

Flood Control

Flood control is defined by the District as the control, containment, and safe disposal of storm waters which flow or drain into or through the District. A regional flood control plan has been prepared for a 250 square mile portion of the District's service area west of the Friant-Kern Canal in order to manage 100-year flood events (severity and probability of flood occurring in any one year is one percent). This plan includes three reservoirs and four detention basins to impound flood waters outside the urban area. Only four of these facilities are fully or partially constructed at this time. However, it is expected that the approved Redbank-Fancher Creeks Flood Control Project (U. S. Army Corps of Engineers) will be constructed by 1994, which will complete the District's planned facilities.

The majority of the Woodward Park community is not within designated 100-year flood prone areas. The exceptions are within the San Joaquin Riverbottom, and the area east of Millbrook Avenue and south of Alluvial Avenue. Development within those existing flood prone areas must comply with mitigation measures required by federal, state, and local regulations. Completion of the Redbank-Fancher Creeks Project will implement the District's objective of providing flood control protection from a 100-year flood event outside of the riverbottom area. This will eliminate the requirement for on-site mitigation measures, such as increasing the floor elevations of buildings, within the 100-year flood prone areas.

The San Joaquin Riverbottom area, however, will remain vulnerable to flooding during years of above average precipitation due to flood channel restrictions. In addition, overtopping of the dam and unregulated releases during flood seasons due to the failure of the spillway gates to operate may contribute to riverbottom flooding. The proposed plan update would continue to minimize exposure of people and property to flood hazards by designating the riverbottom for recreation/open space uses.

Urban Storm Water Drainage

The District's urban or local storm water drainage systems are

required in order to control localized storm water drainage and protect private and public property from damage. A storm drainage master plan has been prepared for a 150 square mile area in order to implement the systematic collection and disposal of urban storm water. This system consists basically of a series of surface flow (curb and gutter), drain inlet, pipeline, and retention basin improvements. The urban area is divided into drainage zones by the drainage master plan, which allows implementation of functional segments of the system as development occurs or funding is available. Storm water drainage improvements within developing areas are usually constructed concurrently with property development and are paid for by the property owners.

Unlike some other areas, the District has indicated that there are few limitations in the ability of the master planned storm water drainage system to accommodate intensified urbanization, as depicted by the 1984 Fresno General Plan. The Woodward Park community, excluding the northeast growth area, is divided into eight drainage zones with separate pipelines and ponding basins. Drainage zone DK, however, which serves the northwest quadrant of the plan area, has been constructed to drain into the San Joaquin River. Nonresidential development within this zone is required by the District to construct on-site drainage mitigation measures to reduce pollutant levels in storm water runoff before entering the drainage system.

The capacity of urban drainage systems is designed to accommodate two-year storm events (severity and probability of a flood occurrence is 50 percent in any one year). While some temporary nuisance occurs during more intensive storm events, this level of service has been generally accepted as being the most cost-effective. Higher levels of service could be constructed, but at a considerably higher cost.

Future Conditions and Limitations

The Fresno Metropolitan Flood Control District master planned urban storm water drainage facilities are, or can be, constructed with adequate capacity to accommodate increased urban storm water runoff anticipated with implementation of the Woodward Park Community Plan Update. A potential limitation is planned drainage of a portion of the Woodward Park community to the San Joaquin River and the accumulation in ponding basins of contaminants from rainfall and runoff. In 1985, the District prepared an EIR for its District Service Plan which examined the potential impacts of discharging urban storm water into the river channel. In 1984, the District published the Fresno Nationwide Urban Runoff Program (NURP) Project Report which examined potential groundwater and soil contamination due to storage and percolation of storm water runoff in ponding/recharge basins.

Long-term environmental impacts of discharging to the river and the corresponding mitigation measures identified by the District's Service Plan EIR are as follows:

ENVIRONMENTAL IMPACTS

May contribute slightly to downstream flood hazard.

Potentially high concentrations of suspended solids, nutrients, BOD, unionized ammonia, metals, and coliforms in the river.

Increased pollutant concentrations from industrial area in drainage zone El.

MITIGATION MEASURES

Temporary storage of water in gravel mining ponds.

Control releases from Friant Dam and Big Dry Creek Reservoir to minimize flooding.

Route water through detention basins prior to discharge to San Joaquin River.

Discharge water to retention basins rather than to the river.

Industrial portion of runoff intercepted and discharged to retention basin.

Three unavoidable environmental impacts of discharging water to the river were identified as follows:

1. Increases in heavy metals, ammonia, suspended solids, pesticides, coliform bacteria, and oxygen-demanding substances for a short time during and after storm events.
2. Gradual build up of heavy metals and other settleable materials in deeper, pooled or slow-moving portions of the river.
3. Periodic violation of water quality objectives for the San Joaquin River contained in the Water Quality Control Plan Report (California State Water Resources Control Board, 1975).

The Service Plan EIR notes that the identification of water quality impacts are tentative due to the many variables of river and tributary conditions and limited data. The need to implement mitigation measures is uncertain. It is further suggested that implementation of a monitoring program would be appropriate in order to provide more complete water quality information on urban storm water drainage discharged to the river. The Flood Control District has subsequently entered into an agreement with the United States Geologic Survey to prepare and implement a water quality monitoring program. The Community Plan Update policies would prohibit the drainage of storm water runoff from commercial and industrial development directly into the river.

The Urban Runoff Report concluded that the collection and percolation of storm water runoff in basins has no adverse impact upon ground-

water quality. However, there may be some impacts upon the recreation use of basins if contaminants, primarily lead, are allowed to accumulate in the surface soil. The following nine best management practices were recognized as being the most appropriate and effective in addressing potential groundwater and soil contamination.

Recommended Urban Runoff Management Practices of NURP Project Report

1. Maintain the basic practice of retention and recharge of urban storm runoff subject to certain modifications.
2. Provide low-flow basins for all recreational basins and evaluate low-flow basins for basins serving industrial areas. Periodically remove solids from the bottom of low-flow basins and from basins serving principally industrial areas.*
3. Remove the portion of the turf and upper soil layer from the recreational basins as necessary.*
4. Monitor soil from unturfed areas in recreational basins and remove as necessary.*
5. Consider having industrial developments contain, or pretreat, runoff from portions of their sites that may contain toxic material.
6. Have the District work together with other local agencies to be certain that water quality aspects are adequately considered in the review process for future industrial developments.
7. Develop a management plan to determine the best means of disposing of hazardous soil removed from the basins.
8. Continue the practice of recharging high-quality imported surface water.
9. Implement a long-term monitoring program of basin soil and groundwater contaminants.

* The need for soil removal should be based on further soils monitoring and contaminant build up curves relative to public contact and drinking water standards.

Impacts

- o Impacts of increased urban storm water drainage to the riverbottom and permanent ponding basins have been identified in the Fresno Metropolitan Flood Control District's EIR for the District Service Plan (1985) and Fresno National Urban Runoff Program Project Report (1984).

Mitigation Measures

- o Implement mitigation measures previously identified in the Flood Control District's 1985 District Service Plan EIR and the NURP Project Report, reviewed in this document.

- o Implement policies 7-4.2, 8-4.1, and 8-4.2 of the Plan Update.

PALEONTOLOGICAL/ARCHAEOLOGICAL/HISTORICAL RESOURCES

Historic Sites

The Woodward Park planning area does not contain any recorded National Historic Places or California Historical Landmarks. There have been no locally significant historical sites identified within the planning area to date.

Paleontological Sites

There have been significant findings of paleontological remains in the San Joaquin Valley, locally in the vicinity of Clovis, Friant, and Fancher Creek. In the mid-1970's, several bones of a Pleistocene-age mastodon were unearthed to the west of the Woodward Park community in a gravel pit near the San Joaquin River. Since then, no other findings have been made in this area. Dr. Arthur Staebler, a paleontologist associated with California State University, Fresno, considers it possible there are other remains in the area, especially near the river where ancient flood waters may have trapped prehistoric creatures, but acknowledges that there is no great probability associated with that geographical location relative to paleontological findings. Similarly, it is possible, but not highly probable, that the riverbottom area of the Woodward Park community could contain paleontological remains.

Archaeological Sites

A records search performed by the Southern San Joaquin Valley Archaeological Information Center in Bakersfield has revealed two known archaeologically-significant sites in the Woodward Park community at the bluff edge of the San Joaquin River. These are both identified as historic trash dump sites dating as far back as the turn of the century.

The sites have been recorded in surveys with as complete an accounting of their artifacts as possible in view of the disturbances that have occurred over the years. Much of the disturbance has been caused by the drainage of water running over the bluff edge, washing the deposits to the fields below and scattering them over a wide area. In addition, the tillage of land for agricultural purposes has further scattered the deposits. It can also be assumed that some artifacts have been removed by collectors who have found the sites.

There have also been archaeological investigations within the area as a result of previous development projects. These have not yielded any significant findings. In all, approximately 1,260 acres have

been surveyed; only 15 percent of the total plan area. Much of the plan area south of Shepherd Avenue and west of Maple Avenue has been either developed or subjected to intensive agricultural cultivation. The possibility of preserving any sites of archaeological significance, if they existed, would be minimal. Areas to the east of Maple Avenue, as well as within the riverbottom, remain essentially undeveloped. However, many years of agricultural cultivation and resource extraction activities have left few areas undisturbed.

Future Conditions

An archaeological site can be disturbed in place (by agricultural practices, urban development or vandalism) or by the removal of the artifacts. The disturbance of a site destroys all or part of the site's context (the physical association that the artifacts share with each other and the surrounding area). It is this context that the archaeologist uses to interpret the site. With its disturbance, a site loses much of its value to archaeologists. As a consequence, its significance to the body of knowledge regarding prehistoric man is severely diminished. Archaeological and historic sites are important resources and governments at all levels have enacted legislation to protect paleontological, archaeological, and historic findings.

The Fresno City Council has enacted the Preservation of Historic Structures Ordinance, finding that the protection, enhancement, perpetuation, and use of these structures and districts is in the best interest of the City. The act provides for the identification and protection of historic structures and districts in the City and the review of development proposals to insure that the historic integrity of these structures and districts is preserved.

Federal legislation has set preservation standards for historic and prehistoric remains on federal lands or lying within federally-funded project areas. State legislation also provides protection in the language of the California Environmental Quality Act (CEQA) and the California Public Resources Code, requiring the preservation of antiquities in state construction projects.

According to CEQA, if, as a result of an environmental assessment for a proposed development, the project area is found to contain unique archaeological resources and it can be demonstrated that the project will cause damage to this resource, the City may require reasonable efforts to be made to permit any or all of the resource to be preserved in place or left in an undisturbed state. Examples of such treatment may include any of the following:

1. Planning construction to avoid archaeological sites.
2. Deeding archaeological sites into permanent conservation easements.
3. Capping or covering archaeological sites with a layer of soil before building on the sites.

4. Planning parks, green space or other open space to incorporate archaeological sites.

Further urbanization designated by the plan is not expected to have a significant impact upon archaeological, paleontological or historical resources. The identified sites along the bluff edge of the river will not be impacted by the plan since they are in areas designated for open space and will, therefore, be protected from development. The riverbottom area, as well, is designated for open space uses.

Impacts

- o None identified.

Mitigation Measures

- o Implement applicable City, state, and federal policies and requirements.

SCHOOLS

The Woodward Park community planning area is served by the Clovis Unified School District, which has experienced school capacity deficiencies with the rapid pace of urban development and increasing student enrollment. These problems could continue as the area's population increases. However, new facilities are planned for construction over the next five years to accommodate the anticipated student population increase and relieve schools that are presently overcapacity.

The Clovis Unified School District presently has four schools in operation within the plan boundaries. These consist of two elementary schools, one intermediate school, and one high school. These facilities, which also serve surrounding areas beyond the plan boundaries, are presently considered overcrowded. As an interim measure, the District is currently using portable classrooms to increase capacity at existing schools and transporting some elementary grade level students to other facilities. A third elementary school (south side of Champlain Avenue, between Friant Road and Fort Washington Road) is under construction and scheduled for completion by September 1989. Two other elementary school sites within the plan area, and a high school/intermediate/elementary educational complex site to the east of the plan area, have been acquired.

TABLE 9

	<u>Area Student Capacity</u>	<u>Area Student Population</u>
Elementary Schools	1,430	1,753
Intermediate School	1,250	491 (1,307 total enrollment)
High School	2,200	839 (2,396 total enrollment)

Future School Capacity Demand and Planned Facilities

The District updates its School Facilities Master Plan every five years with data on student population projections previously made and current student enrollment. This information is used to reassess their school facility needs and plan for them accordingly. The following table is currently used by the Clovis Unified School District and indicates pupil generation by housing unit type in the Woodward Park community planning area.

TABLE EIR-10

HOUSING TYPE/PUPIL GENERATION

	<u>Ages of Child</u>				
	<u>0-4</u>	<u>5-11</u>	<u>12-13</u>	<u>14-17</u>	<u>Total</u>
<u>Housing Type</u>					
Single Family	.441	.505	.072	.126	1.144
Apartment	.176	.212	.084	.117	.590
Condominium	.067	.045	.045	.056	.213
P.U.D.	.170	.105	.088	.152	.515

The following student populations were projected based upon anticipated development during the five-year planning period of the interim plan as well as full development of the planning area, as depicted by alternative land use plans.

TABLE EIR-11

PROJECTED STUDENT POPULATION INCREASES

	<u>Five-Year Planning Period</u>	<u>Ultimate Development Staff Alternative</u>	<u>Ultimate Development Committee Alternative</u>
Elementary	1,640	10,143	12,621
Intermediate	300	1,855	2,308
High School	<u>492</u>	<u>3,043</u>	<u>2,786</u>
TOTAL	2,432	15,041	17,715

In addition to the three elementary school sites in use or under construction, the District has acquired two sites and requested that three future sites be designated with the Plan Update. Construction of the fourth and fifth elementary schools within the planning area is scheduled for 1990 and 1991. The District may also consider converting the Pinedale School, west of the plan area, to a kindergarten through sixth-grade elementary school. This would provide six elementary schools with a capacity of approximately 3,650 students, which may be sufficient to accommodate the five-year student population increases for the Woodward Park community and surrounding attendance area. Initial phases of the new intermediate and high school facilities at Nees and Minnewawa Avenues are scheduled for 1991 and 1992. This will provide additional elementary and high school student capacities of 1,300 and 2,400, respectively. However, substantial overcrowding of the existing intermediate and high school facilities would occur in the interim period.

The ability to provide adequate school facilities is influenced by the reliability of land use plans and their arrangement of urban uses. Schools represent substantial public investments which can be optimized by establishing efficient service areas. Land use planning predicts the distribution and density of population upon which the location of school facilities are based. Schools occupy a substantial amount of land and have specific characteristics; therefore, they should be integrated in a compatible manner with surrounding uses and public service facilities.

The following table charts the optimum size, capacity, and service area characteristics utilized by the Clovis School District to plan for future school sites.

TABLE EIR-12

SCHOOL SITE STANDARDS

	<u>Optimum Capacity</u>	<u>Attendance Radius</u>	<u>Site Size</u>
Elementary	730	1 mile	15 acres
Intermediate	1,450	2 miles	40 acres
High School	2,600	2 miles	60 acres

These characteristics require substantially undeveloped land that is economically feasible to acquire. In addition, the District has also developed locational criteria to determine the optimum placement of a school site. It is the District's policy to oppose locating schools next to commercial or multiple-family residential developments in order to avoid, where possible, overcrowding or conflicts with intensive uses which may draw students off campuses.

In addition to considering surrounding land uses, the surrounding street circulation system must be able to effectively disperse traffic and reduce congestion immediately surrounding the school site. A school should be located on a collector street to provide adequate traffic-carrying capacity. In addition, serious consideration should be given to neighborhood locations that maximize the opportunity for students to walk or bicycle to school and minimize the use of private vehicles. Coordination between the City and the school district should be sought in the review and approval of property development plans and the design of street patterns in order to provide adequate access to neighborhood schools and avoid excessive congestion.

Impacts

- o Short-term student capacity deficiencies may result from continued urban development over the next five years, particularly at the intermediate and high school levels, prior to completion of programmed school facilities.
- o Ultimate full development of the plan area, particularly the northeast quadrant, will necessitate the designation and development of several new elementary schools as well as contribute to the potential need for an additional high school and intermediate school.
- o The need to transport students to school sites may increase as development occurs due to large or irregular attendance boundaries which may be interrupted by major streets.

Mitigation Measures

In order to provide adequate funding for capital improvements over the next five years and beyond, the school district may have to consider the following mitigative measures:

- o Continue to implement the current new construction school fee of 20 cents per square foot of residential building area and 10 cents per square foot of commercial building area, and consider increasing the fee rate.
- o Pursue the approval of an additional local general obligation bond measure.
- o Continue to participate in statewide efforts to obtain additional funding from the state, such as general obligation bonds or federal sources.

FIRE AND EMERGENCY MEDICAL SERVICES

The City of Fresno Fire Department provides fire protection, fire prevention, and paramedic services to all properties within the incorporated boundaries of the City. With the exception of a few properties which were already developed in 1976, the entire community planning area is subject to the Urban Growth Management (UGM) process which establishes fire service standards for new urban development. Based upon the established standard of a two-mile response travel distance for permanent fire service, the community is divided into two fire station service areas (Station Nos. 13 and 21). Fees for UGM fire stations must be paid by properties upon development to pay for the construction and equipping of the stations.

Fire Station No. 13 has been constructed at Nees and Bond Avenues. It is equipped with an engine (pumper) company. Construction of a temporary facility for Fire Station No. 21 is a requirement of Grupe Development Corporation in order to complete the northernmost portion of its Woodward Lake development. A permanent station site will be established at an appropriately centered location in order to serve the entire north half of the planning area.

Future Fire Service Demands

The UGM process assures the provision of capital facilities and equipment to adequately serve the planning area as urban development occurs, including the highly intensive Community Activity Center and Herndon Corridor areas. However, continued funding of operational expenses is not as certain given past increases in personnel and equipment costs. A budgetary imbalance has occurred over the past several years as discretionary (general fund) revenues have not increased as rapidly as costs. Although UGM analysis continues to show new development as having a balanced cost/revenue

budget impact, many City-wide service levels have been reduced in recent years.

Insufficient revenues could necessitate a reduction in the level of fire safety and emergency medical services being provided or more severe reductions in nonsafety-related services. Previous service level reductions which have been considered include reduced staffing, less intensive fire prevention programs, and service charges for emergency response.

Impacts

- o Increased demands upon fire protection and paramedic services together with traffic congestion, limited water supplies, and budgetary constraints could result in reduced levels of service experienced by this community.

Mitigation Measures

- o Implement existing policies and standards as well as the Plan Update policies/implementation measures related to land use relationships, circulation and traffic capacity, provision of public facilities, and management of water resources.

POLICE SERVICES

The Fresno City Police Department provides law enforcement services to the Woodward Park Community Plan area as annexation and development occurs. The entire planning area is presently located within the Northeast Policing District which is bounded by Blackstone Avenue and Fresno Street on the west, McKinley Avenue on the south, and the City limits of Fresno and Clovis on the north and east. There are a total of 242 sworn police officers and 21 community service officers (CSO's) assigned to the City's five police service districts, with 47 police officers and four CSO's assigned to cover the nine reporting sectors of the Northeast District. The community service officers do not carry firearms and are used for non-emergency calls for service, crime prevention, and preparation of auto and theft reports.

The number of officers deployed to each district and shift depends on the workload demand. According to the Police Department, there are fewer demands per capita north of Shaw Avenue. This could be due to such factors as socioeconomic characteristics, fewer land use conflicts, lower residential densities, higher proportion of owner occupancy, and more modern developments and structures with improved security.

Future Demands For Service

Currently, the Police Department indicates there is insufficient manpower to provide the preferred level of service. This is largely a result of the City's significant growth, both in area

and population, increasing operation and maintenance costs, and insufficient local government revenues. As the community expands with development on the metropolitan fringes, the cost of providing police services may increase disproportionately to the population increase.

Unbalanced growth could necessitate the creation of new policing districts and the need to pay for the costly support facilities currently provided by the five-district system. The Police Department has indicated that in addition to personnel and vehicles, a new dressing station would be necessary if an additional policing district is required.

Unlike UGM fees for fire service, police service fees have not been established to provide for capital improvements, vehicles or the equipment necessary to serve expanded urbanization.

If necessary funding for the additional personnel and vehicles needed to provide law enforcement services is not available, there could be reductions in law enforcement-related community based programs and services. Further, reductions in the level of services now provided could include the inability to respond to nonemergency calls, the requirement of mail-in reports in lieu of personal contact, reduced crime prevention patrol activities, increased use of CSO's, response delays, and possibly cross-dispatching from one beat to another causing the officers to be pulled away from their own patrol beats should the need arise. The Police Department has also noted that traffic congestion generated by excessive urban intensities or inadequate circulation could hamper response times as well as increase the demand for officers to maintain traffic safety.

Impacts

- o Expansion of urban development will result in the increased demand for law enforcement services which may necessitate an additional police changing station with vehicle parking, service facilities and staffing or result in reduced service levels due to increased coverage by the existing policing area and staff.

Mitigation Measures

- o Pursue the implementation of a UGM development fee to provide and equip a new police changing station, if necessary.

PUBLIC LIBRARY

Existing Conditions

The Fresno County Free Library has noted that there is presently no branch library or bookmobile service in the Woodward Park community. The nearest branch library is the Politi Branch, located

in the shopping center at the southwest corner of First Street and Bullard Avenue. Library services have been reduced in recent years due to budget constraints, and future service level modifications can be anticipated.

Future Conditions

Branch library service within the planning area cannot be anticipated without significant revenue increases. Residents of the planning area may have to continue to travel to existing branch libraries or the main library in central Fresno.

Impacts

- o Increased travel and/or decreased public access to public library facilities.

Mitigation

- o Consider alternative funding sources, such as UGM development fees, to provide library facilities.

LONG-TERM IMPLICATIONS OF THE PROPOSED PROJECT

RELATIONSHIP BETWEEN SHORT-TERM USES AND LONG-TERM PRODUCTIVITY/CUMULATIVE IMPACTS

Implementation of the Woodward Park Community Plan Update will result in physical changes to the community's environment as agricultural and vacant land is developed for urban uses. This conversion to urban use is not a short-term allocation of resources and land, but a long-term commitment providing residential, business, educational, and recreational facilities for the community's expanding population. Although the Interim Plan facilitates continuation of short-term development trends, it recognizes the implications of northeastward growth related to cumulative and long-term reductions in the productivity of land and other resources.

Implementation measures and strategies are incorporated within the Plan Update to discourage the premature commitment of land and resources to urban activities. These strategies include urban reserve designations, explicit allocation of sewer service capacity, and the determination of resource capacities and management practices necessary to sustain a healthy urban community. However, certain long-term and cumulative impacts of urban development and related human activities are inevitable. Those impacts which are of significance in the Woodward Park community are identified as follows:

- o Generation of air pollution in proportion to increased population and the number of vehicle miles traveled.
- o Depletion of groundwater resources and increased DBCP contamination if offsetting water recharge and water quality management methods are not implemented.

- o Increased noise along major thoroughfares in proportion to increased vehicular traffic.
- o Increased energy consumption, including consumption of nonrenewable energy sources, in proportion to increased population and attendant urban activities.
- o Generation of wastewater in proportion to increased population, which induces a long-term demand for larger or improved collection systems and treatment facilities.
- o Consumption of natural resources for the construction of buildings and public facilities.

SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

The continued development of urban uses within the Woodward Park community would result in an irreversible loss of rural and agricultural land. Irreversible commitments of resources would involve the consumption of nonrenewable energy resources and the use of construction materials obtained from nonrenewable resources (sand, gravel, cement, metals). Finally, the creation of an urban community with associated activities will result in increasing levels of noise and artificial lighting or glare which are essentially irreversible without significant technological or life-style changes.

UNAVOIDABLE IMPACTS

The Woodward Park Community Plan Update provides for continued urban development and increased urban activities which consume natural resources, require public facilities and services, and cause changes in existing physical conditions. Although mitigative measures may be implemented to reduce the consequences of urban life, they cannot be entirely avoided given current technological capabilities, social practices or legal constraints. The following list identifies those impacts considered to be unavoidable:

- o Increased traffic volume and congestion on regional routes serving areas in addition to the Woodward Park community.
- o Increased air pollution generated by additional mobile and stationary sources.
- o Increased traffic-generated noise.
- o Conversion of agricultural land.
- o School capacity deficiencies.
- o Consumption of nonrenewable energy resources.

ALTERNATIVE PLAN CONCEPTS

This section examines alternative plan concepts in general land use terms in order to compare the relative environmental consequences associated with a range of possible urban development and population growth scenarios. Two plan concepts initiated by the City Council, Alternative "A" - Development Department Recommendation and Alternative "B" - Committee Recommendation, are presented in detail by the draft plan. A third alternative is the "no project" alternative or existing Woodward Park Community Plan which is required to be considered by CEQA Guidelines. A fourth alternative is expanded and intensified urbanization described by the 1984 Fresno General Plan. Although a limitless number of alternative plan concepts can be conceived, these four are representative of the broad spectrum of development possibilities ranging from relatively constrained to unconstrained growth.

Alternative "A" - Development Department Recommendation

This plan concept strives for the maximum utilization of readily available facilities and resources to accommodate current development trends over the five-year planning period of the Interim Plan Update. It is intended to respond to demands for urban development in the northeast metropolitan area while avoiding significant new commitments in public infrastructure. The extent and intensity of urban expansion to be accommodated is defined by the service capacities of existing and planned public facilities. The predominant residential use will remain medium-low density, which can basically be served by the adaptation or extension of the current sewer, major street, and water delivery systems.

The anticipated impacts of this plan concept have been examined in detail by this EIR and are summarized below:

- o Additional agricultural and open space land on the urban fringe will be converted to urban uses over the next five years.
- o Continued outward expansion will necessitate reliance on the private automobile as the principal mode of transportation with concomitant air quality impacts.
- o Several regionally important circulation routes such as Herndon Avenue, Freeway 41, and Friant Road will experience considerable congestion in the future from traffic generated from throughout the northerly portion of the metropolitan and rural County areas, including the Woodward Park community.
- o Additional urban development will increase groundwater consumption which must be carefully managed to assure the continued availability of an adequate supply and acceptable quality of water for public use.
- o Extensive amounts of office and commercially designated

uses, far exceeding the demands of the ultimate population-holding capacity of the community, may generate residential growth demands beyond the plan's boundary.

Alternative "B" - Citizens Advisory Committee Recommendation

This plan alternative provides for the continuation of current medium-low density residential development trends extending out to the plan boundaries. Planned urban residential uses would accommodate an ultimate population considerably in excess of the current estimated capacity of the Herndon sewer trunk. This plan concept relies upon the public improvement responsibilities and corresponding economic constraints of the current UGM program to manage urban growth.

In addition to the impacts associated with Alternative "A," the following environmental consequences have been identified as associated with this plan concept:

- o Increasing groundwater overdraft and exposure to DBCP contamination may occur without opportunities to implement a system of recharge basins to replenish groundwater aquifers and reduce the intrusion of contaminated groundwater.
- o Reduced efficiency and increased maintenance costs of public facilities and service systems would occur should urban development proceed in a noncontiguous manner, and bypassed properties could be unserviceable should sewer and water service capacity constraints not be resolved.
- o Premature discontinuance of agricultural activities could occur should sporadic urbanization increase land use conflicts and stimulate speculative land acquisitions.
- o Traffic flows and safety may be impaired as intermittent street improvements occur with incomplete road sections causing traffic bottlenecks.

"No Project" - Current Woodward Park Community Plan

This alternative plan concept would continue to designate medium density residential uses (4.99 to 10.37 dwelling units per acre) as the prevailing land use designation for the community. Development could occur at a substantially more intensive level, although recent development trends have been generally within the medium-low density range. The northeast growth area (approximately 3,100 acres) portion of the community would be withheld from urbanization until the extraordinary costs of providing public facilities are resolved. A minimum \$17,000 per acre development fee for expansion of sewer, water, and street facilities was identified by the northeast growth area fiscal impact study.

The impacts associated with the previous two alternatives could potentially apply to this alternative, depending on the City Council's response to incremental development proposals. In addition, the following environmental impacts may occur:

- o Land use conflicts would increase as antiquated plans and policies would not serve as a reliable guide for the development and maintenance of a functional, well-integrated community.
- o Intensified urban development or incremental encroachment into the new growth area would increase demands upon inadequate sewer, water, and street facilities without comprehensive measures to mitigate the impacts.
- o Air and water quality degradation would probably be greater than the preceding alternatives due to the failure to implement comprehensive street circulation and groundwater remedial measures.

Expanded and Intensified Urban Development - Implementation of 1984 Fresno General Plan

The 1984 Fresno General Plan envisions the ultimate development of the Woodward Park community out to its Willow Avenue and Copper Avenue boundaries at a medium density residential intensity. This concept, which might ultimately accommodate a population of 130,000 people, was presented to the City Council as one of several preliminary alternatives during the Plan Update preparation process. It also served as the basis for the 1987 Fiscal Impact Study. Implementation of this concept would result in a living environment that is substantially different from the existing community's, and contrary to current development trends.

This alternative would result in the intensification of many of the previously identified impacts, although the opportunity would be available to identify and implement comprehensive mitigation measures. The following consequences could occur as a result of pursuing this plan concept.

- o Traffic congestion on regionally significant routes would reach extremely high levels which would be impractical to mitigate due to costs and land use impacts (conversion of expressways to grade separated freeways).
- o Water demands would far exceed the area's groundwater resources, necessitating the subsidization of the new growth area with the surface water resources which have been secured by the existing urban community.
- o Already developed residential neighborhoods would experience a declining quality of life as characterized by increased noise exposure, declining air quality, and excessive demands upon public facilities and services.

GROWTH-INDUCING IMPACTS OF THE PROPOSED PLAN

The Woodward Park Community Plan Update is intended to guide the continuation of current urban development trends over the next five years in a manner compatible with community characteristics,

resource constraints, and public facility capacities. However, it is reasonable to expect that if adequate resources and services are available, urban development will continue beyond this five-year planning period and ultimately result in the complete development of the planning area. Implementation of plans and policies during this five-year planning period is expected to have long-term environmental consequences which may either enhance or reduce opportunities to achieve a healthy and efficient urban community. This EIR has focused both upon the immediate impacts of current development trends and the long-term impacts of continued urban growth which may be prompted by implementation of the Plan Update.

The extent, intensity, and timing of urban development and the associated growth-inducing implications will vary with the alternative plan designations and policies proposed by the Development Department, Citizens Advisory Committee, and individual plan modifications. Several plan alternatives, including the Citizens Advisory Committee's recommendation to extend the medium-low density residential designation to the northern and eastern plan boundaries, have been examined which are representative of growth-inducing influences ultimately resulting in full development of the Woodward Park community.

Implementation of the Plan Update, with the designation of over 477 acres of office use and 240 acres of commercial uses, could encourage continued urban development beyond the plan boundaries. In addition to the large total area, these planned uses include highly-intensive regionally important business and employment centers such as a mid-rise building office park, regional shopping center, and regional medical facilities. These facilities will provide employment and services for a regional population far exceeding the 82,000 potential population of the Woodward Park community at full development of predominantly medium-low density residential uses. Pressure for semirural and suburban residential development to the north and east of the community can be anticipated.

Expanded and intensified residential development to the north and east of the plan boundaries would exacerbate the environmental impacts associated with development of the Woodward Park community. These include wastewater collection and treatment, groundwater quantity and quality conditions, traffic congestion, air quality, noise, agricultural land conversion, and public facilities and services. Although substantial areas of residential use have already been proposed or approved for rural residential and suburban satellite communities to the north and east of the plan area, further development should be scrutinized to assure the sustained viability and productivity of public facilities and resources.

IMPACTS OF PLAN MODIFICATIONS

Modifications and alternative land use designations requested by individual property owners or recommended by the Citizens Advisory Committee would generally provide for more intensive urban development than designated by the staff-recommended Plan Update. These

changes would convert primarily medium and medium-low density residential uses to 86 acres of office, 64 acres of commercial, 50.5 acres of medium-high density residential, 30 acres of medium density residential, and five acres of medium-low density residential uses. With only one exception, these office and commercial uses are located outside the high intensity community activity center and corridor areas of the draft Plan Update and would generally not be compatible with Plan's proposed policies/implementation measures.

Although there are some exceptions, the environmental impacts associated with urban development within the Woodward Park community may increase with the intensity of development. The expected increased impacts related to the proposed modifications or alternative land uses are identified on Table 13. Increased vehicular traffic volumes and related congestion, air pollution, and noise can be expected to occur as well as increased demands for fire protection and police services. Demand for water, sewer, and school resources and facilities may be reduced with the proposed nonresidential uses, but increased with the proposed higher density residential uses.

Implementation of mitigation measures necessary to reduce the impacts of intensified urbanization may require higher expenditures of financial resources, increased use of governmental authority and police powers, and greater private sector participation. These may include additional street and circulation improvements, transportation system management programs, sewer and water conservation measures and on-site design measures. These should be identified and applied as conditions of approval of all changes of zone district classifications necessary to implement these modifications.

TABLE EIR-13

INCREASED SIGNIFICANT IMPACTS RELATED TO PLAN MODIFICATIONS

SIGNIFICANT IMPACTS

REQUESTED MODIFICATION	WATER Overdraft	Contamination Service Level	SEWER Over Demand	TRAFFIC Congestion	Increased Volume AIR POLLUTION	Mobile Sources Stationary Sources	Increased Noise Sources	Increased Energy Levels	AGRICULTURE Consumption	SCHOOLS Capacity	SCHOOLS Land	FIRE Service Demand	POLICE Service Level	LIBRARY Service Level	LAND USE Conflicts	LONG-TERM IMPACTS Unavoidable Irreversible Cumulative Growth In- ducing		
1. Community Commer.				+	+	+	+				+	+			+	+	+	+
2. Office	*	*	*	*	+	+	+	+			+				+	+	+	+
3. Office	*	*	*	*	+	+	+	+			+				+	+	+	+
4. Community Commer.				+	+	+	+				+	+				+	+	+
5. Office	*	*	*	*	+	+	+	+			+				+	+	+	+
6. Community Commer.				+	+	+	+				+	+			+	+	+	+
7. Neighbor. Commer.				+	+	+	+				+	+			+	+	+	+
8. Office	*	*	*	*	+	+	+	+			+					+	+	+
9. Neighbor. Commer. & Office				+	+	+	+		+	+	+	+	+	+	+	+	+	+
10. Medium High Dens. Res.	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+
11. Medium High Dens. Res.	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+
12. Medium High Dens. Res.	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+
13. Medium High Dens. Res.	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+
14. Medium High Dens	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+
15. Medium Dens. Res	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+
16. Medium Low Dens. Res.	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+
17. Office	*	*	*	*	+	+	+	+			+					+	+	+
18. Neighbor. Commer.				+	+	+	+				+	+				+	+	+
19. Medium High Dens. Res.	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+

+ Anticipated increase in significant impact.

* Potential increase in significant impact with medical office uses.

SOURCES CONSULTED

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- City of Fresno, California. Final Environmental Impact Report No. 10049 (prepared for the 1976 Woodward Park Community Plan), 1976.
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- City of Fresno, California. Final Environmental Impact Report No. 10097 (prepared for the Fresno Mid-Rise/High-Rise General Plan Amendment and Implementing Ordinance), 1987.
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- Fresno County Air Pollution Control District; 1982 Fresno Clean Air Plan.
- Granskog, Jane, Ph.D., "Archaeological Survey and Historic Research Report on Two Street-Widening Projects for the City of Fresno, California." California State College, Bakersfield, California, 1985.
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Kenneth D. Schmidt and Associates, Groundwater Conditions in the
Fresno North Growth Area. City of Fresno, California, 1987.

United States Department of Agriculture, Soil Conservation Service.
Soil Survey of Eastern Fresno Area, 1971.

NY-2/147
vs/18+/ENV4

RESOLUTION NO. 89-464

A RESOLUTION OF THE COUNCIL OF THE CITY OF
FRESNO ADOPTING THE WOODWARD PARK COMMUNITY
PLAN AS A REFINEMENT OF THE 1984 FRESNO
GENERAL PLAN, AMENDING THE 1984 FRESNO
GENERAL PLAN AND REPEALING THE
ALLUVIAL-FIRST AREA SPECIFIC PLAN

WHEREAS, the Fresno City Council on February 5, 1976 and on
November 20, 1984, adopted the current Woodward Park Community
Plan and the General Plan, respectively; and

WHEREAS, the Community Plans are essential to the refinement
of the 1984 Fresno General Plan; and

WHEREAS, the Council directed that the 1976 Woodward Park
Community Plan be updated; and

WHEREAS, the Woodward Park Community Plan is being updated
pursuant to the Local Planning and Procedures Ordinance (LPPO) and
was formulated by staff with the help of an 18-member Citizens
Advisory Committee and with substantial public input and was
initiated by the Fresno City Council on April 4, 1989, all in
conformance with applicable provisions of State Planning Law, the
LPPO and guidelines promulgated under it; and

WHEREAS, the Fresno City Planning Commission, at its meeting
of August 16, 1989, adopted Resolution No. 9722 recommending
adoption of the Woodward Park Community Plan update as recommended
by the Citizens Advisory Committee and including several
modifications; and

WHEREAS, the Council of the City of Fresno, on August 22, August 29, September 19, and November 14, 1989, held a duly noticed public hearing to consider the draft Woodward Park Community Plan update and Final Environmental Impact Report (EIR) No. 10100 and at the public hearings considered all information contained in the draft Woodward Park Community Plan and EIR No. 10100, and all written and oral evidence and testimony related thereto; and

WHEREAS, prior to taking action on this project, Council adopted a resolution certifying Final EIR No. 10100 as required by the California Environmental Quality Act, and finding that changes or alterations have been incorporated into the project to avoid or substantially lessen certain significant environmental effects but that specific economic, social or other considerations make infeasible mitigation measures to substantially reduce certain other unavoidable significant effects; and

WHEREAS, the Council has adopted a Statement of Overriding Considerations by Resolution No. ____ finding that the benefits of the proposed project outweigh the unavoidable adverse environmental effects identified in Final EIR No. 10100.

NOW, THEREFORE BE IT RESOLVED that the Council of the City of Fresno hereby:

- 1 Finds that the Woodward Park Community Plan Update has been the subject of analysis and review by the citizens advisory

committee, Development Director, Planning Commission and City Council, all of whom have reviewed and considered the original reasons for the plan's recommendations; and the Council finds that the discussion found at pages 2 through 10 of the Director's report to Council on August 18, 1989 and pages 1 through 11 of the draft plan, dated July 21, 1989, justify a change to the previous community plan's recommendations; and

2. Approves Exhibit A, Woodward Park Community Plan map (staff recommendation), attached hereto and incorporated herein by reference; and
3. Approves amendments to the 1984 Fresno General Plan in order to maintain consistency between it and the Community Plan, as depicted on Exhibit B, attached hereto and incorporated herein by reference; and
4. Repeals that portion of the Alluvial-First Specific Plan contained within the Woodward Park Community Plan as depicted on Exhibit C, attached hereto and incorporated herein by reference; and
5. Approves the Woodward Park Community Plan document, consisting of maps and written statements of goals, policies and implementation measures, as contained in Exhibit "D" attached hereto and incorporated herein by reference.

BE IT FURTHER RESOLVED THAT, that the Mayor and Clerk of the City be, and they hereby are, authorized and directed to make the appropriate certification upon the originals of these documents and file the same as a permanent record in the office of the City Clerk.

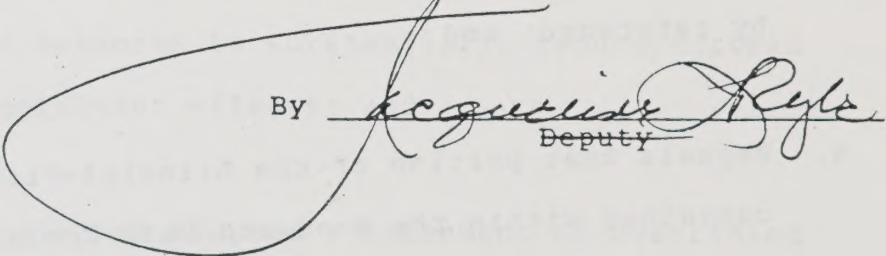
CLERK'S CERTIFICATE

STATE OF CALIFORNIA)
COUNTY OF FRESNO)
CITY OF FRESNO)

I, Jacqueline L. Ryle, City Clerk of the City of Fresno, certify that the foregoing resolution was adopted by the Council of the City of Fresno, California, at a regular meeting held on the 5th day of December 1989.

JACQUELINE L. RYLE
City Clerk

BY

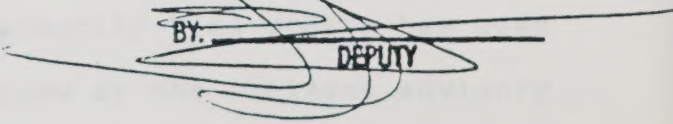

Deputy

Attachments: Exhibit A - Woodward Park Community Plan Map
Exhibit B - 1984 Fresno General Plan Amendment Map
Exhibit C - Alluvial-First Specific Plan Map
Exhibit D - Woodward Park Community Plan Text
and Final EIR No. 10100.

DU:flh
6548T/323

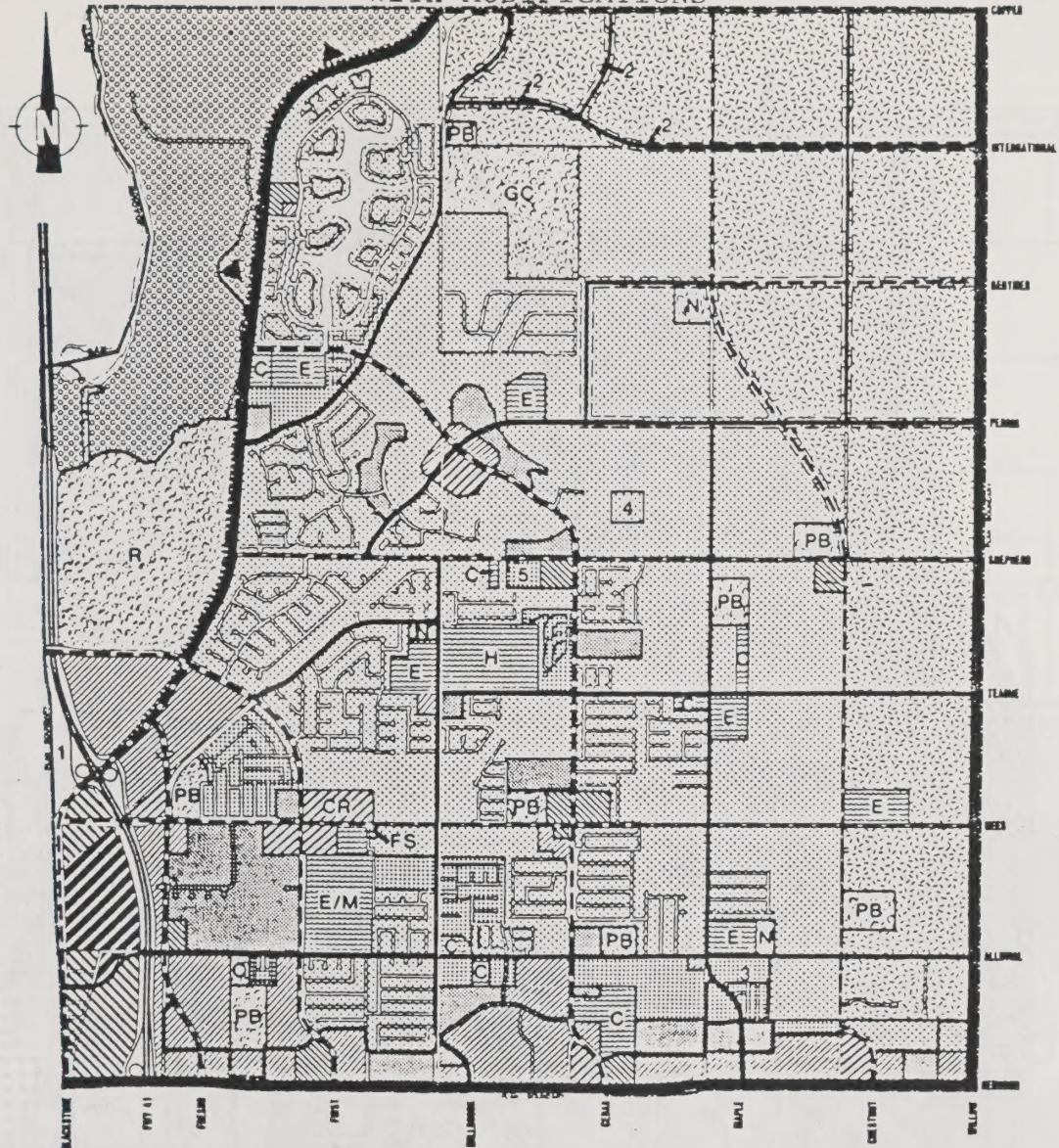
APPROVED AS TO FORM
CITY ATTORNEY'S OFFICE

BY


DEPUTY

WOODWARD PARK COMMUNITY PLAN

STAFF RECOMMENDATION
WITH MODIFICATIONS



RESIDENTIAL

- Ag / Urban Reserve
- Medium Low Density
- Medium Density
- Medium High Density

COMMERCIAL

- Office
- Neighborhood
- Community
- Commercial Recreational
- General-Heavy
- Regional

CONDITIONAL AMENDMENTS / NOTES

- 1 - Property of Caltrans.
- 2 - Exact alignment to be determined.
- 3 - Maximum of 8 units per acre.

OPEN SPACE

- Recreational / Open Space
- Golf Course
- Neighborhood Park
- Community Park
- Regional Park
- Ponding Basin
- Trail
- Vista Point: Precise location to be determined

PUBLIC FACILITIES

- Public / Quasi-Public
- Church

- Elementary School
- Middle School
- High School
- Fire Station

CIRCULATION

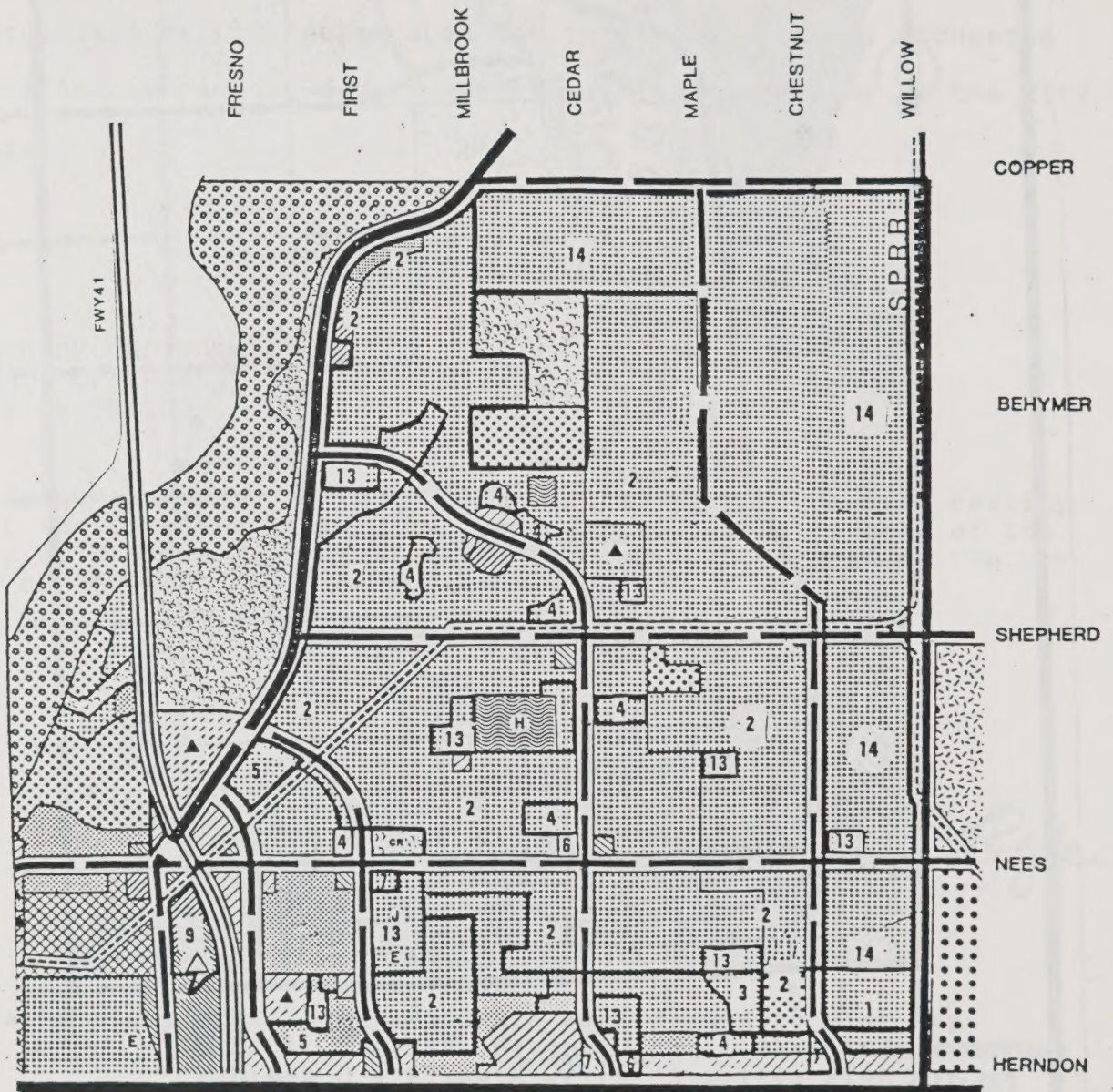
NOTE: Local streets are for reference only.

- Proposed Streets
- Herndon corridor local streets
- Collector
- Arterial
- Super Arterial
- Expressway
- Freeway

- 4 - Density to be allocated for elderly housing only to contiguous church property.
- 5 - Maximum of 8 units per acre.

EXHIBIT "B"

CHANGES TO THE 1984 GENERAL PLAN



LEGEND

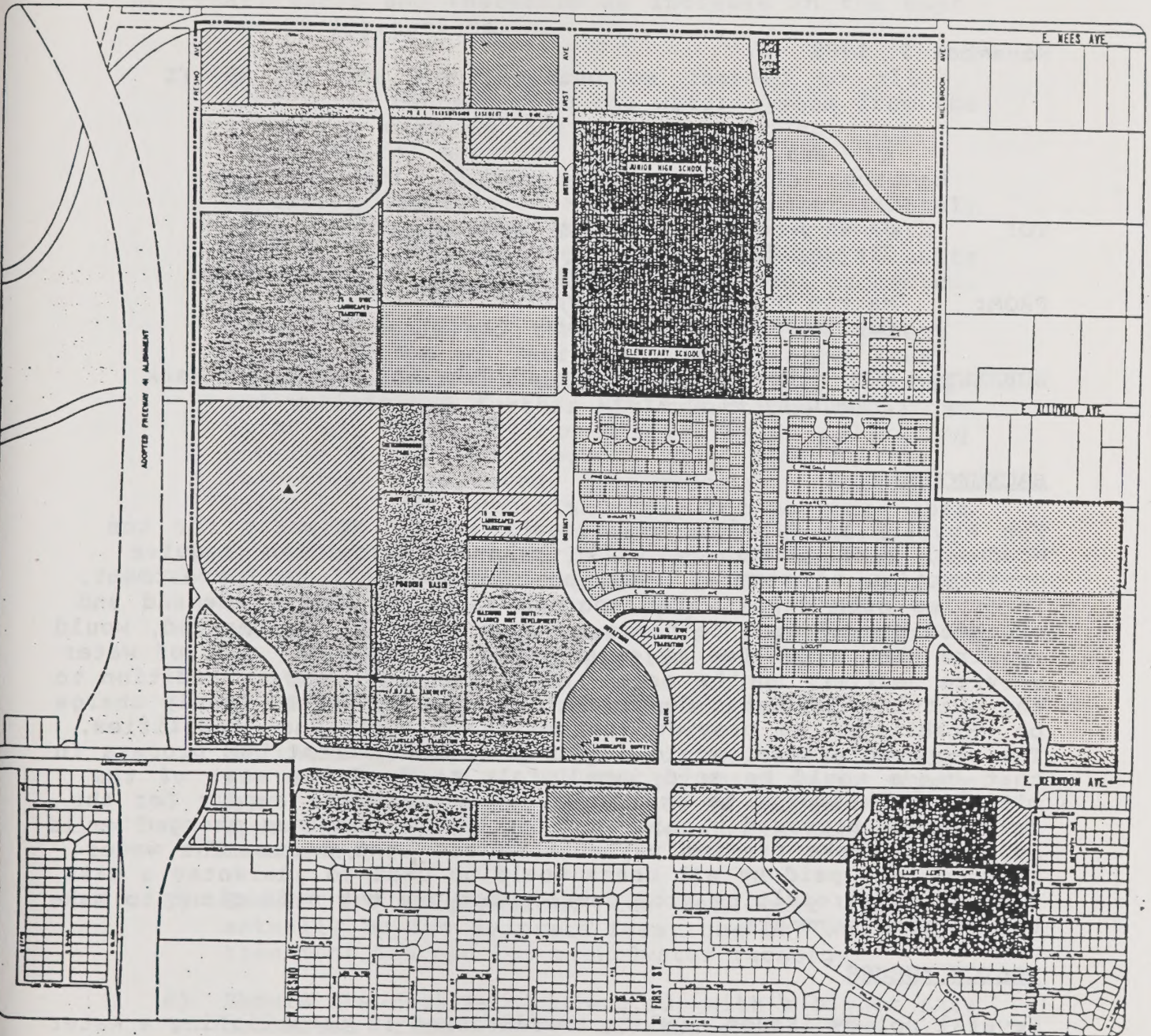
EXISTING
DESIGNATION

PROPOSED
DESIGNATION

[Pattern 1]	1	LOW DENSITY RESIDENTIAL
[Pattern 2]	2	MEDIUM LOW DENSITY RESIDENTIAL
[Pattern 3]	3	MEDIUM DENSITY RESIDENTIAL
[Pattern 4]	4	MEDIUM HIGH DENSITY RESIDENTIAL
[Pattern 5]	5	OFFICE COMMERCIAL
[Pattern 6]	6	NEIGHBORHOOD COMMERCIAL
[Pattern 7]	7	COMMUNITY COMMERCIAL
[Pattern 8]	8	GENERAL COMMERCIAL
[Pattern 9]	9	REGIONAL COMMERCIAL
[Pattern 10]	10	RECREATIONAL OPEN SPACE
[Pattern 11]	11	MULTI-USE OPEN SPACE
[Pattern 12]	12	LIGHT INDUSTRIAL
[Pattern 13]	13	PUBLIC FACILITY
[Pattern 14]	14	AGRICULTURAL

() COMMITTEE ALTERNATIVE

EXHIBIT "C"



**CITY OF FRESNO
DEVELOPMENT DIVISION
PLANNING DIVISION
AUGUST 1980**

AMENDMENTS

DATE	RES. NO.	DATE	RES. NO.
5-8-80	84-68	5-5-81	86-108
5-8-80	84-69	5-10-81	86-109
5-8-80	84-70	5-10-81	86-110
5-8-80	84-71	5-10-81	86-111
5-8-80	84-72	5-10-81	86-112
5-8-80	84-73	5-10-81	86-113
5-8-80	84-74	5-10-81	86-114
5-8-80	84-75	5-10-81	86-115
5-8-80	84-76	5-10-81	86-116
5-8-80	84-77	5-10-81	86-117
5-8-80	84-78	5-10-81	86-118
5-8-80	84-79	5-10-81	86-119
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5-8-80	84-84	5-10-81	86-124
5-8-80	84-85	5-10-81	86-125
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5-8-80	84-87	5-10-81	86-127
5-8-80	84-88	5-10-81	86-128
5-8-80	84-89	5-10-81	86-129
5-8-80	84-90	5-10-81	86-130
5-8-80	84-91	5-10-81	86-131
5-8-80	84-92	5-10-81	86-132
5-8-80	84-93	5-10-81	86-133
5-8-80	84-94	5-10-81	86-134
5-8-80	84-95	5-10-81	86-135
5-8-80	84-96	5-10-81	86-136
5-8-80	84-97	5-10-81	86-137
5-8-80	84-98	5-10-81	86-138
5-8-80	84-99	5-10-81	86-139
5-8-80	84-100	5-10-81	86-140

LEGEND

- MEDIUM LOW DENSITY SFR
- MEDIUM DENSITY SFR
- MEDIUM HIGH DENSITY MFR
- SHOPPING CENTER
- PROFESSIONAL OFFICE
- PUBLIC / QUASI-PUBLIC FACILITIES: SCHOOL, HOSPITAL, FIRE STATION
- OPEN SPACE
- PLANNING AREA BOUNDARY
- SFR SINGLE FAMILY RESIDENTIAL
- MFR MULTIPLE FAMILY RESIDENTIAL

WE HEREBY CERTIFY THAT THIS MAP AND ACCOMPANYING MATERIAL CONSTITUTES A REFINEMENT OF THE HOOPER AND WOODWARD PLANNING AREA PLANS ADOPTED BY RESOLUTION NO. 80-480 OF THE FRESNO CITY COUNCIL ON AUGUST 19, 1980

Mayor
MAYOR

City Clerk
CITY CLERK

**Alluvial/First Area Specific Plan
Land Use Element & Boundary Map
August 1980**

NOTES:

- EXISTING CITY FIRE STATION
- CONDITIONAL AMENDMENT, REFER TO AMENDMENT FILE

City of



November 3, 1989

TO: James E. Aldredge, City Manager
City of Fresno

FROM: Marvin D. Johnson, Director
Public Works Department *MD Johnson*

SUBJECT: UGM Water Supply Charges for the Woodward Park
Community Plan Area

BACKGROUND

The ability to provide an adequate supply of water for the Woodward Park Community will in staff's opinion require construction of several additional wells, well head treatment, interties with other water sources prior to service demand and expanded groundwater recharge. UGM policy, if implemented, would require that a UGM fee be established to cover the cost of water service delivery to the area. Staff proposes that in addition to the existing UGM Water Supply Well Fee, a UGM water supply charge be established to provide the necessary additional facilities. The proposed process would differ from the current UGM process in that bonds would be sold immediately to fund the cost of the mitigation measures to provide an adequate water supply for the development proposed within the plan area. The fees charged would be used to make premium payments on the bond sale. The water service rate paid by all users would be used to guarantee a cash flow if fees resulting from development are not sufficient to make the premium payments.

POLICY ISSUES

Several policy issues need to be addressed in establishing a water supply charge.

- 1) Should the fee paid on developing property cover the full cost of the mitigation? Or should the service rate be raised to spread all or a portion of the cost to the existing developed community? It can be argued that removing DBCP from the groundwater and additional recharge will benefit

all users and therefore an increase in the user fee is appropriate.

- 2) Should the fee proposed be charged to all properties connected to the water system from the effective date of the fee or only to those entitlements approved after the fee is established? Currently there are 13 approved Tentative Subdivision Maps covering approximately 1900 residential units in the Woodward Park Community. Approximately 1,185 residential units covered by Final Maps have not yet been connected.

Staff is concerned that because of the recent identification of increased DBCP in the area, lowered maximum contaminant levels (MCL) for DBCP, and anticipated further MCL reductions contained in AB 21, there will be difficulty in delivering potable water and adequate fire flow to the tentatively approved developments. Section 66498.1 of the Subdivision Map Act provides that if health and safety issues exist, requirements can be added to tentatively approved maps at time of final map considerations. It is our opinion that the proposed water supply fees should be charged to these developments to cover the cost of an increased recharge program and well head treatment of existing wells found to be contaminated, serving these developments.

If these tentatively approved residential units are not required to pay the proposed water supply fee, the fee would need to be increased approximately 27% to fund the needed mitigation measures.

- 3) Should the proposed UGM fee for water supply actually be two separate fees, one for well head treatment and one for groundwater recharge?
- 4) Should the fees be accelerated, with a higher rate collected from early development? When sufficient fees are collected to cover the cost of the facilities, the fees would be reduced to a service rate with reimbursements going to those who paid at the higher rate or put into a fund to offset costs of future plans and development.

Staff believes that if bonds are sold to fund all of the immediately needed facilities, with the

fees increased to cover financing costs, early accumulation of funds through accelerated fees will not be necessary.

DISCUSSION OF PROPOSED FEE

Current UGM Water Supply Well Charge

The current water well charge amounts to \$800 acre. Water Well Service Area 101-S which comprises most of the Woodward Park Area contains an unobligated balance of approximately \$50,000. Attached Exhibit A contains an evaluation of the water supply well fee based on Water Demand Analysis prepared by the Water Division. The Water Demand Analysis points out the exceptional high water use in the area. Staff has determined that the current fee is not adequate to cover the cost of well construction in the plan area. A total of 22 wells-in addition to the 4 wells currently being designed are needed to serve the Plan Area. The capital cost to construct these wells would amount to \$1,300 per acre. If it is assumed that 6 of the 22 needed wells are constructed using bond funds and 3 per year are added using fees, staff estimates the UGM water well charges should be increased to \$1,470 per acre. We would also propose that commercial and office development be charged on an equivalent residential unit basis rather than per acre.

Proposed Well Head Treatment Fee

The evaluation contained in Exhibit A estimates that a total of 22 water wells producing an average of 1,300 gallons per minute will be needed to serve the area at full development. It can be assumed that at least 12 new wells and one existing well will need well head treatment. The cost of this treatment, using current technology, could reach \$7,000,000. If this cost is to be borne by the remaining approximately 15,364 equivalent residential units in the plan area, the capital cost per unit would be \$456. It is assumed as in well development that 6 of the wells will receive treatment in the first year, funded with bond proceeds, and the remaining wells will be treated in subsequent years using fee proceeds. Adding bond financing charges over a 20 year period, assuming build out equally distributed over 7 years, the charge per equivalent residential unit would be \$625.

If the Council should choose not to apply the fee to tentatively approved development, the fee would amount to \$794 per unit.

Proposed Groundwater Recharge Fee

The estimated cost of a single purpose recharge facility to be located near Willow Avenue and the Enterprise Canal similar to that discussed in staff's report to the Council on October 17, 1989 (FID Entitlement Workshop) is \$4,958,000. This includes the cost of an intertie system from a well field at the facility to the transmission grid system existing in the plan area. See Exhibit B.

Staff proposes that one-half of this cost be paid by development through the proposed UGM fee and the other half be paid by the water user through an increase in water service rates.

The capital cost per equivalent residential unit would amount to \$161 per acre. The fee would increase to \$265 per unit if the cost of 20-year bond financing is added.

If the Council chooses not to apply the fee to tentatively approved development, the fee would increase 28% to \$340 per unit.

RECOMMENDATIONS

Staff proposes the following scenario regarding UGM water supply fees:

- 1) UGM Water Supply Well Charge. The current fee of \$800 per acre will not be adequate to cover the capital cost of the well construction needed in the plan area. The Master Fee Schedule should be revised to \$1,300 per acre. The fee should be immediately increased to \$1,470 per acre if a bond program is initiated. Another change recommended by staff is that the Master Fee Schedule and the Municipal Code, if necessary, provide that office and commercial development pay the fee based on equivalent residential units rather than per acre.
- 2) UGM Water Well Head Treatment and Recharge Fee. The Municipal Code and Master Fee Schedule should be amended to provide a means of levying and collecting one UGM fee for well head treatment and groundwater recharge. Service Areas where well head treatment and recharge are needed would be established. These Service Areas could be located in any section of the City where groundwater contamination is found. The fee would be charged

per equivalent residential unit in the Service Area.

The fee for the Woodward Park Community, based on current preliminary estimates of cost would amount to \$890 per unit.

- 3) Application. The UGM Water Well Head Treatment and Recharge Fee would apply to all development units to be connected to the water system in the Service Area following the effective date of the Code change. The fee would therefore apply to all building permits, current approved tentative subdivision maps and future entitlement applications.
- 4) Service Rate. The fee schedule would not include an accelerated rate but would include the cost of financing 20-year bonds.
- 5) Water Service Rates. Water service rates (user charges) should be considered as a backup to guarantee that the cash flow from UGM fees is sufficient to cover annual bond premiums. If there is a development slow down the water service rate could be increased to provide the necessary cash flow.

Inasmuch as there is some general benefit to the entire community from a recharge facility, it would, in our opinion, not be a violation of basic UGM policy if up to one half of the cost of the facility be paid for through user charges. We believe all of the well head treatment should be a cost of development.

It is recommended that the Council authorize staff to pursue the above UGM water supply fee scenario.

ALTERNATIVES

As discussed above, the following alternatives, not included in staff's recommendation may be considered:

1. Separate fees for well head treatment and groundwater recharge.
2. Construction of the facilities on a "pay as you go" basis or as requirements of development rather

than through sale of bonds. If so, accelerated fees should be considered.

3. Increase water service rates to spread all or a larger portion of the cost of mitigation to existing water users.
4. Include all of the cost of groundwater recharge in the fee rather than spread one-half as proposed by staff to the water service rate.
5. Fees to be applicable only to future development entitlement applications and not to tentatively approved development.

MDJ/dr/1489

Attachments: Exhibit A
Exhibit B

c: Robert Baida
Al Solis
Harvey Wallace
Anthony J. Telesco
Daniel L. Trafican
Paul Stewart

EXHIBIT A

UGM WATER SUPPLY WELL FEE

Public Works Staff estimates the Woodward Park Community Plan A (staff recommendation) will accommodate 24,429 equivalent residential units on 8,290 acres. This estimate considers the actual number of units currently developed which may in fact be different from the land use designated on the Plan. Approximately 5,090 acres would be subject to development fees. A total of 769 acres are recommended for office and commercial development. It is estimated that 9,065 equivalent units currently exist in the plan area. Therefore, 15,364 units remain to be developed. The remaining undeveloped acres subject to fees amounts to approximately 3,380 acres.

Staff estimates that 22 wells are needed in excess of the current wells serving the area and the 4 wells funded and currently under design. This assumption is based on a Water Demand Analysis prepared by the Water Division which determines that the peak hour water demand in the Woodward Park Plan Area is 2.12 gpm for single family and 1.51 gpm for multi family residential units.

At a cost of \$200,000 per well the capital fee for water wells should amount to \$1,302 per acre.

SUMMARY

Total Equivalent Residential Units in Plan Area	24,429
Connected Equivalent Units	9,065
Equivalent Units Remaining in Plan Area	15,364
Tentatively Approved Equivalent Units (800 acres)	3,350
Total Additional Wells Needed at 1,300 gpm Production	22 wells
Total Acres including urban reserve acres outside staff plan area	8,290 acre
Total Acres Remaining on which fees can be collected	3,380 acre
Capital Cost per acre: $\$4,400,000 \div 3,380$ acres	\$1,302/acre
Estimated Fee which includes 20-year Bond Financing Costs	\$1,470/acre

EXHIBIT B

RECHARGE FACILITY ESTIMATE Willow Avenue and Enterprise Canal

60 Acre Site:

Montgomery's estimate for a 20-acre site is \$705,000.
Assume 60 acre site three times the cost of 20 acres

\$2,115,000

Cost of Development

Say \$1,000,000

\$1,000,000

Well Fields

Four wells at \$150,000

\$ 600,000

Transmission System

24" main x 2 miles

\$ 792,000

Subtotal

\$ 4,507,000

Contingencies

10 percent of Subtotal

\$ 450,000

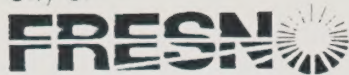
Total Estimated Cost

\$ 4,958,000

Assume \$2,479,000 will be covered by UGM Water Supply Charge and
\$2,479,000 will be funded through an increase in water service rate
(user fee).

MDJ/dr/1489

City of



November 6, 1989

TO: JAMES E. ALDREDGE, City Manager

FROM: MARVIN D. JOHNSON, *M. Johnson*
Director
Public Works Department

SUBJECT: WATER SERVICE TO THE WOODWARD PARK COMMUNITY PLAN AREA

This memorandum is written to advise you, the Development Department and the Fire Department of a concern Public Works has regarding our ability to supply an adequate quantity of water to the Woodward Park Community Plan Area (Plan Area) this coming summer. We believe this matter should be taken into consideration as development entitlements are approved in final form the next several months.

The City's ability to provide sufficient water for domestic and fire suppression uses in the Woodward Park Plan Area may be more difficult than was anticipated at the end of last summer when conditions were improved over the beginning of the peak flow period. Several factors have led us to this conclusion. The maximum contaminant levels (MCL) for DBCP was lowered to 0.2 parts per billion. Well 89A on Teague Avenue between Cedar and Maple Avenues has shown readings above that level and we anticipate Department of Health Services will require that the well be shut down in January or that all users of the water be notified that the water exceeds the MCLs. (In January, the average of the readings for six months will have exceeded the MCLs.) Well 85 which is located outside of the Plan Area but which supplies water to the southeastern part of the area has been shut down because of DBCP contamination. Staff is pursuing well head treatment at both of these well locations, but funding, property acquisition, CUP approval, design, construction, trial operation and testing need to be accomplished before water meeting the MCLs can be delivered. We believe the earliest date these wells can be relied on for continuous operation will be July 1990.

The Governor recently signed AB 21 (Sher) into law which provides that MCLs for all contaminants may at some time be lowered to a 1 in 1 million health risk. For DBCP this would be 0.002 parts per billion or just over trace levels. Although, from what we understand, these MCLs for DBCP will not be effective in the near future, there is always a possibility they will be implemented earlier.

The Council has appropriated funds for construction of four wells in the Plan Area and staff is proceeding with test drilling, site acquisition and design. Because of the threat of DBCP contamination and the likely need for well head treatment, the well sites must be acquired with sufficient size and with CUP approval to accommodate well head treatment. The BIA and individual developers are cooperating and assisting to bring these wells on line as soon as possible. Our experience, however, has been that development of a well from the initiation of test drilling to production is eleven months. We are attempting with the help of the development industry, to shorten this period, but we do not anticipate that all of the wells will be producing before the summer months.

Another factor is the rapid growth in the Plan Area. Our ability to keep pace with this rapid growth is hampered by the groundwater contamination and the time which has been added to the development of wells to deal with this contamination. The rapid growth in the Plan Area is evidenced by approximately 4,300 residential units which are either approved, but not connected, tentatively approved under Tentative Maps, or in process toward tentative approval.

Approximately 1,150 residential units not yet connected are included in Final Maps. Building Permits on these units are being applied for daily. We anticipate that a high percentage of these units will be completed or under construction next summer.

Of immediate concern to the Public Works Department is the number of approved tentative tract maps which by law, when final maps are filed, must be approved by the Council if they comply with all map approval conditions. Tract maps which fall into this category are:

TR 3996	Westshore Avenue between Lakeview and Coronado	48 Units
TR 4008	Perrin and Cedar	295 Units
TR 4015	Southeast Corner Millbrook and Teague	96 Units
TR 4034	W/S Maple between Shepherd and Teague	136 Units
TR 4050	S/S Alluvial between Maple and Chestnut	76 Units
TR 4071	SW Corner Maple and Nees	221 Units
TR 4101	NE Corner Perrin and Saybrook	67 Units
TR 4104	SW Corner Cedar and Teague	208 Units
TR 4117	NW and SW Corner Maple and Perrin	353 Units
TR 4120	N/S Shepherd between Millbrook and Cedar	27 Units
TR 4122	E/S Millbrook between Plymouth and Ft. Washington	57 Units
TR 4132	E/S Ft. Washington between Champlain and Millbrook	135 Units
TR 4135	North Corner Champlain and Perrin	<u>152 Units</u>
Total Units		1,871 Units

Recognizing that most, if not all, of these approved tentative tract maps are "vesting maps", also complicates matters since the developers now have a vested right to proceed with development based only on those ordinances, policies and standards in effect at the date the City accepts the Tentative Map for processing. The only exception is if health and safety conditions become an issue at final map processing.

In addition to the thirteen (13) maps listed above, the City has accepted and is presently processing, the following tentative maps:

TR 4125	NW Corner Maple and Teague	108 Units
TR 4134	Freeway 41 and Audubon	180 Units
TR 4159	E/S Millbrook between Nees and Teague	<u>35 Units</u>
	Total Units	323 Units

Immediately upstream in the map approval process are those properties where Development Department staff has responded to a pre-filing review. Those potential maps are listed as follows:

TR 4000	Millbrook between Friant and Lakeview	212 Units
TR 4026	SW Corner Chestnut and Alluvial	195 Units
TR 4075	E/S Maple between Teague and Nees	82 Units
TR 4100	SE Corner Millbrook and Shepherd	120 Units
TR 4112	S/S Shepherd between Maple and Chestnut	151 Units
TR 4157	E & W Side Saybrook and Buckhill	<u>200 Units</u>
	Total Units	960 Units

Water Division staff is presently developing a computerized water supply/demand model which we anticipate will assist us in predicting the effect on water quantity and pressure when connections are made, wells are added or shut down or the transmission grid system is expanded. We hope to have this model operational and validated against actual field conditions within a month.

Chapter 4.5 of the Subdivision Map Act provides that at the time of final approval of the subdivision map, other requirements may be imposed or the map may be denied if conditions are determined to exist which would be dangerous to the health or safety of the residents of the development or adjacent area.

JAMES E. ALDREDGE

Page 4

November 6, 1989

Considering all of the above information, Public Works recommends that Final Subdivision Maps in the Woodward Park Plan Area not be approved unless a finding can be made that an adequate supply of water meeting safe drinking water standards and fire flows is available or will be available at the time of occupancy of the development. If a Final Map is approved, we recommend that approval of building permits for the units included in the map be delayed if the Development Director, after consultation with the Public Works Director, concludes that an adequate supply of water will not be available at completion of construction. We further recommend that occupancy permits not be issued for completed units included in the map if a satisfactory water supply is not available.

MDJ/CJK/pcl

c: Robert Baida
Al Solis
Bud Armstrong
Harvey Wallace
Dan Trafican
Tony Telesco
Paul Stewart (BIA)

ENGR/151/CJK1

A-18

ATTACHMENT "C"

RESOLUTION NO. 89-463

A RESOLUTION OF THE COUNCIL OF THE CITY OF FRESNO, CALIFORNIA, CERTIFYING FINAL ENVIRONMENTAL IMPACT REPORT (EIR) NO. 10100 FOR THE WOODWARD PARK COMMUNITY PLAN UPDATE.

WHEREAS, the EIR No. 10100 relating to the draft Woodward Park Community Plan has been prepared in compliance with the California Environmental Quality Act (CEQA); and

WHEREAS, the Planning Commission held a duly noticed public hearing on July 26, and August 2, 1989, and considered final EIR No. 10100 and the City of Fresno staff and Citizen Committee recommendations, written comments, and testimony received regarding Final EIR No. 10100; and

WHEREAS, the Fresno City Planning Commission at its meeting of August 16, 1989, adopted Resolution No. 9721, recommending certification of final EIR No. 10100; and

WHEREAS, the Council of the City of Fresno, on August 22, August 29, September 19, and November 14, 1989, held a duly noticed public hearing to consider the draft Woodward Park Community Plan and final EIR No. 10100, and all written and oral evidence and testimony related thereto.

PAIDED _____
12/5/89
CITY OF FRESNO _____

NOW THEREFORE BE IT RESOLVED the Council of the City of Fresno certifies that final EIR No. 10100 has been completed in compliance with the California Environmental Quality Act, the State CEQA Guidelines and the City of Fresno's Environmental Quality Ordinance, and that the Council has reviewed and considered the information contained in final EIR No. 10100 prior to approving the Woodward Park Community Plan.

BE IT FURTHER RESOLVED, that certain mitigation measures which will substantially lessen or avoid potential significant adverse environmental effects identified in final EIR No. 10100 will be incorporated into the project by adoption of the Woodward Park Community Plan update and certification of final EIR No. 10100 as identified in attached Exhibit "A" and incorporated herein by reference; and

BE IT FURTHER RESOLVED, that certain significant unavoidable adverse environmental effects resulting from project implementation together with mitigation measures to reduce these effects have been identified by final EIR No. 10100, but it is infeasible to avoid or substantially lessen these effects due to economic, social or other considerations. These environmental effects and mitigation measures are summarized in a separate statement incorporated by reference and attached as Exhibit "B"; and

BE IT FURTHER RESOLVED, that CEQA requires the Council to balance the benefits of a proposed project against its unavoidable environmental risks in determining whether to approve the project, and the Council has determined that the benefits of the project outweigh the unavoidable environmental effects for the reasons stated in the Statement of Overriding Considerations incorporated by reference in this Resolution and attached as Exhibit "C"; and

BE IT FURTHER RESOLVED, that based upon substantial evidence in the record of these proceedings, that specific economic, social and other considerations make infeasible the "No Further Development" Alternative which would either reduce or substantially mitigate the significant unavoidable effects for the reasons stated in the separate Statement of Overriding Considerations incorporated by reference in this Resolution and attached as Exhibit "C"; and

BE IT FURTHER RESOLVED, that reporting and monitoring procedures in the form of verification findings necessary to implement the environmental impact mitigation measures established by certification of final EIR No.10100 and adoption of the Woodward Park Community Plan and to ensure compliance during project implementation shall be established in accordance with attached Exhibits "D-1", "D-2" and "D-3" incorporated herein by reference.

BE IT RESOLVED THAT, that the Mayor and Clerk of the City be, and they hereby are, authorized and directed to make the appropriate certification upon the originals of these documents and file the same as a permanent record in the office of the City Clerk.

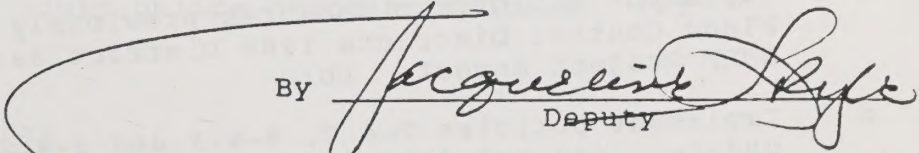
CLERK'S CERTIFICATE

STATE OF CALIFORNIA)
COUNTY OF FRESNO)
CITY OF FRESNO)

I, Jacqueline L. Ryle, City Clerk of the City of Fresno, certify that the foregoing resolution was adopted by the Council of the City of Fresno, California, at a regular meeting held on the 5th day of December 1989.

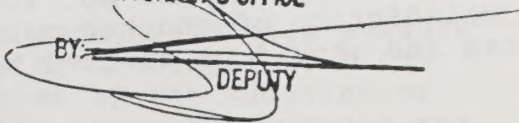
JACQUELINE L. RYLE
City Clerk

By


Deputy

Attachments: Exhibit A - Significant Effects
Exhibit B - Significant Effects Mitigated to Extent Feasible
Exhibit C - Statement of Overriding Considerations
Exhibits D-1, D-2 and D-3 - Verification and Monitoring Procedures

APPROVED AS TO FORM
CITY ATTORNEY'S OFFICE

BY: 

DEPUTY

DU:flh
6549T/323

Exhibit "A"

WOODWARD PARK COMMUNITY PLAN UPDATE FINAL EIR NO. 10100, STATEMENT OF POTENTIAL SIGNIFICANT ADVERSE ENVIRONMENTAL EFFECTS, AND ASSOCIATED MITIGATION MEASURES TO BE REQUIRED IN OR INCORPORATED INTO THE PROJECT IN ORDER TO AVOID OR SUBSTANTIALLY LESSEN THE SIGNIFICANT EFFECT

A. Sewer - Overdemand for Sewer Capacity

Mitigation Measures

- o Implement a sewer trunk fee for new development to finance the Herndon Sewer Trunk capacity enhancement and a proportionate share of the proposed Grantland Sewer Trunk. (a)
- o Implement plan policies 6-1.2, 6-1.3, 6-2.1 and 7-2.1 through 7-2.8 to assure that sewer flows generated by urban development will not exceed capacity. (a) and (b)
- o Implement water conservation plan policy 7-3.2 to reduce water consumption and the generation of waste water. (a)

B. Flood Control and Storm Water Drainage

Mitigation Measures

- o Implement mitigation measures previously identified in the Flood Control Districts 1985 District Service Plan EIR and NURP Project Report. (b)
- o Implement policies 7-4.2, 8-4.1 and 8-4.2 of the plan update. (a) and (b)

* * * * *

Note: Parenthetical notations following each mitigation measure identify the applicability of the following findings: (a) the measure has been incorporated into the plan by its adoption or certification of EIR No. 10100; or (b) the measure is within the jurisdiction of another public agency and the measure has been, or can and should be adopted by such other agency.

C. Schools

Mitigation Measures

- o Continue to implement the current new construction school fee of \$.20 per square feet of residential building area and \$.10 per square feet of commercial building area and consider increasing the fee rate. (b)
- o Pursue the approval of an additional local general obligation bond measure. (b)
- o Continue to participate in statewide efforts to obtain additional funding from state sources, such as general obligation bonds, or federal sources. (b)
- o Implement policies 7-7.1 through 7-7.4 of the Woodward Park Community Plan. (a) and (b)

D. Fire and Emergency Services

Mitigation Measures

- o Implement existing fire safety policies and standards as well as the plan update policies/implementation measures related to land use relationships, circulation and traffic capacity, provision of public facilities and management of water resources. (a)

E. Police Services

Mitigation Measures

- o Pursue the implementation of a UGM development fee to provide and equip police changing station. (a)

F. Library

Mitigation Measures

- o Pursue alternative funding sources for new facilities. (b)

Note: Parenthetical notations following each mitigation measure identify the applicability of the following findings: (a) the measure has been incorporated into the plan by its adoption or certification of EIR No. 10100; or (b) the measure is within the jurisdiction of another public agency and the measure has been, or can and should be adopted by such other agency.

Exhibit "B"

WOODWARD PARK COMMUNITY PLAN UPDATE FINAL EIR NO. 10100 STATEMENT OF UNAVOIDABLE SIGNIFICANT ADVERSE ENVIRONMENTAL EFFECTS WHICH ARE MITIGATED TO THE EXTENT FEASIBLE THROUGH THE MEASURES IDENTIFIED BELOW BUT CAN NOT BE ELIMINATED OR SUBSTANTIALLY LESSENED.

- A. Water - Groundwater Overdraft, Groundwater Contamination and Reduced Service Levels. These impacts will be partially mitigated by short-term measures implemented during the five-year planning horizon of the Community Plan. However, substantial mitigation will require continuing geologic and hydrologic studies, coordinated regional groundwater recharge practices and integrated intergovernmental policy programs over an indefinite period of time and expanded geographic area.

Mitigation Measures

- o The City of Fresno shall prepare an annual water budget and capital improvements program which projects water consumption demand, water delivery capability and water well improvement commitments. (a)
- o UGM service delivery plans shall require the dedication of a satisfactory water well site which can accommodate wellhead water treatment system as a condition of development when determined necessary by the City of Fresno in order to provide adequate water delivery. (a)
- o Incorporate the cost of providing wellhead water treatment facilities for DBCP contamination into the UGM water well fee which shall apply to all development entitlements which are approved or extended after adoption of the Interim Woodward Park Community Plan Update. (a)
- o Escalate UGM water well fees to pay for test holes, production well drilling and equipping of pump stations when 50% of the demand for service is created by development. (a)

* * * * *

Note: Parenthetical notations following each mitigation measure identify the applicability of the following findings: (a) the measure has been incorporated into the plan by its adoption or certification of EIR No. 10100; or (b) the measure is within the jurisdiction of another public agency and the measure has been, or can and should be adopted by such other agency; and (c) the measure is infeasible to implement to the extent necessary to adequately reduce the environmental effect.

- o No new development shall be approved unless the city's minimum acceptable level of service for public water supply can be assured. (a)
 - o Implement policies 7-3.1 through 7-3.10 and 8-1.1 through 8-1.9 of the Woodward Park Community Plan Update. (a), (b) and (c)
- B. Traffic - Increased Traffic Volumes and Increased Traffic Congestion with Reduced Service Levels. Localized traffic impacts can be mitigated within the scope of the plan. However, the accommodation of future traffic volumes resulting from continued local and regional population growth and traffic increases will require implementation of long-term regional transportation system improvements.

Mitigation Measures

- o Implement the plan concept of the Woodward Park Community Plan Update and related policy/implementation measures to establish balanced land uses with supportive circulation and transportation facilities in order to reduce vehicle travel and congestion. (Policies and Implementation Measures under the Land Use, Circulation and Transit Sections). (a) and (c)
- C. Air - Increased Mobile and Stationary Source Air Pollution. Applicable air quality improvement policies and strategies have been incorporated into the plan update. However, substantial mitigation is dependent upon cooperative regional and statewide efforts (San Joaquin Valley Basinwide Air Pollution Control Council and comprehensive air quality study), more efficient consumption of hydrocarbon based fuels and products, and potentially dramatic constraints upon commonly accepted recreational, domestic and business activities which generate air pollution.

Mitigation Measures

- o Continue to pursue the policies/implementation measures as set forth in the Air Quality Element of the 1984 Fresno General Plan (pages 17(a) through 17(d)) and contained herein by reference. (a), (b) and (c)
- D. Noise - Increased Noise Generated by Vehicular Traffic and Commercial/Industrial Activities. Increased ambient noise levels generated by vehicular traffic and intensive urban activities can not be entirely mitigated by on-site mitigation measures such as barriers and building insulation. Long-term reductions of ambient noise levels would necessitate unforeseen technological improvements of equipment and vehicles and increased regulation of noise producing activities.

Mitigation Measures

- o Implement circulation policies/implementation measures of the Woodward Park Community Plan which will reduce exposure to vehicular generated noise (Policies 3-3.4, 3-3.6, 3-3.7, 3-3.8, 3-4.4, 3-4.5, 3-4.6 and 3-4.10. (a) and (c)
 - o Implement noise policies/implementation measures of the Woodward Park Community Plan (Policies 8-3.1, through 8-3.6). (a) and (c)
 - o Require that all fences and walls constructed for residential uses which back or side onto major streets without a frontage road meet the standards of Fresno Municipal Code Section 12-306-N-19. (a)
- E. Geologic, Seismic, Soils and Agricultural Land. Although general plan goals and strategies strive to minimize the loss of agricultural land, the distribution urban growth throughout the metropolitan area necessitates the conversion of some productive or prime agricultural land to urban use.

Mitigation Measures

- o Continued implementation of Urban Growth Management and property development standards which discourage the premature development of land due to the cost of extending urban service facilities. (a) and (c)
- F. Increased Energy Consumption. The increased consumption of nonrenewable energy sources is an unavoidable consequence of population growth and the activities necessary to sustain healthy living conditions.

Mitigation Measures

- o Implement the objectives and policies of the 1984 Fresno General of the 1984 Fresno General Plan Plan Energy Conservation Element. (a) and (c)

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Exhibit "C"

STATEMENT OF OVERRIDING CONSIDERATIONSFinal EIR No. 10100 for the
Woodward Park Community Plan Update

Pursuant to Section 15093 of the California Environmental Quality Act Guidelines, the Council of the City of Fresno hereby determines that the benefits of the staff recommended alternative Woodward Park Community Plan Update outweigh the unavoidable adverse environmental effects and state the following reasons for such determination:

1. If the Woodward Park Community Plan Update is not adopted, urban development may continue to occur on the northeast fringe of the Fresno Metropolitan Area without the benefit of policies and implementation measures providing for the integration of compatible land uses in a manner which will promote the community's continued well-being.
2. The Woodward Park Community Plan Area was identified as one of several appropriate urban growth areas by the 1984 Fresno General Plan based upon the "Joint Resolution on Metropolitan Planning" adopted by the City's of Fresno and Clovis and Fresno County to promote balanced growth. This resolution commits the City of Fresno to plan for managed urban growth in a manner which will provide for the continuation of existing agriculturally related industrial operations.
3. Managed urban development of the Woodward Park Community with a potential population capacity of 65,000, as provided for by the staff recommended plan, will fully utilize public facilities and resources and accommodate an appropriate portion of the projected Fresno Metropolitan Area population increase of 165,000 people over the next fifteen years. The proposed plan update is necessary to reduce the community's ultimate population holding capacity to a level substantially less than that anticipated by the 1984 Fresno General Plan to avoid excessive demands upon limited sewer, streets and groundwater facilities and resources.
4. The application of the staff recommended alternative Plan with modifications will provide planned uses, circulation components, policies and implementation measures, together with existing development standards and urban growth management service delivery requirements, will provide for managed use of public facilities to the extent economically appropriate.

5. It is economically, socially and technologically infeasible, at this time, to reduce the generation of air pollution created by increased population and urban activities within the Woodward Park Community to a greater extent than that achieved in the metropolitan area through implementation of the Fresno General Plan Air Quality Element and the 1982 Fresno Clean Air Plan and the eight-county comprehensive air quality study.
6. The management and maintenance of groundwater quantity and quality must be pursued on a comprehensive region-wide basis in cooperation with other responsible public agencies as advocated by the plan. Therefore, policies to retain an interim urban reserve area on the periphery of the plan area are appropriate and desirable for purposes of comprehensively planning for the area's ultimate development.
7. The "no project" alternative would not substantially reduce or avoid environmental impacts as incremental urban development could continue to occur at a higher intensity and with less comprehensively applied mitigation measures.
8. The occurrence of increased demands upon facilities and resources and their related environmental impacts might be avoided within this community by adopting a plan update prohibiting any further urban development. However, expanded development would occur elsewhere in the metropolitan area where the construction of public facilities has not yet been committed. Facilities within the Woodward Park Community would remain incomplete or underutilized. Long term impacts upon groundwater resources, increased traffic and generation of air pollution caused by urban growth would still occur.

The above stated reasons are based on the information presented in Final Environmental Report Number 10100 and accompanying documents presented to the Council, and in all written evidence and testimony presented to the Council on this matter.

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EXHIBIT "D-1"
ESTABLISHMENT OF VERIFICATION
AND MONITORING PROCEDURES AS REQUIRED
BY THE WOODWARD PARK COMMUNITY PLAN AND FINAL
ENVIRONMENTAL IMPACT REPORT NO. 10100

The City of Fresno hereby institutes a verification system and monitoring procedure designed to implement the public service availability and environmental impact mitigation measures established by the Woodward Park Community Plan Update and Final Environmental Impact Report No. 10100. The purpose of this verification system is to provide the City of Fresno with monitoring procedures and findings necessary to assure implementation of the policies and mitigation measures adopted by the City Council as a part of the Woodward Park Community Plan Update and Environmental Impact Report No. 10100. Specifically, this system will implement policies Nos. 3-5.4, 3-5.5, 7-2.3, and 7-3.1 as they relate to the verification of the availability of adequate sewer, water and street capacities for all new development proposed within the boundaries of the Woodward Park Community Planning Area.

As an integral part of this verification process, an evaluation shall be prepared for each development application that analyzes the project's impacts on air quality, noise, conversion of agricultural land, energy consumption, flood control, schools, fire and police services, and library facilities. The evaluation shall utilize current data obtained from responsible public agencies and qualified project consultants; evaluate the most current mitigation measures applicable to specific developments within the City of Fresno; and shall apply all mitigation measures to the project deemed appropriate by the City of Fresno. This evaluation must be approved by the Development Department Director and considered by the City of Fresno prior to approval of the development application.

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EXHIBIT "D-2"
VERIFICATION AND MONITORING PROCEDURE
FOR THE AVAILABILITY OF PUBLIC SERVICES
WITHIN THE WOODWARD PARK COMMUNITY PLANNING AREA

Upon the submittal of any application for a development entitlement (defined herein as any rezoning, conditional use permit, site plan, subdivision or parcel map) the Public Works Department and Fire Department shall verify (with or without conditions) the availability of adequate sewer and water service and street capacity to accommodate the proposed project.

Verification shall take the form of a signature on a cover form, as suggested below, by the department's Director or designee certifying the availability of each of the above-noted public services, and the attachment of any summary data available and any conditions upon which the findings are based. Verification shall be made as an integral portion of the formal environmental review process and be stated in positive and specific terms in the environmental findings for each project. Verification shall expire in one year unless the development application is approved. Verification will continue to remain valid unless one of the following occurs: (1) the application expires; (2) the development application is amended unless the amendment clearly requires the same or less sewer, water and traffic capacity; (3) the development application is withdrawn; (4) the approved entitlement expires; or (5) the applicant fails to exercise the right granted by the approved development application within six years of an application's approval. When verification expires, the Development Department will notify the Public Works Department. Any extension granted to a development entitlement may require re-verification.

Each verification shall take into account previous development application approvals, previously filed development applications and existing development within the Woodward Park Community and shall, therefore, be based on a cumulative analysis of each affected service delivery system.

The Directors' reliance on federal, state and local code standards in determining capacity are not appealable. However, the specific methods required to provide adequate circulation, sewer and water services to meet local, state and federal standards for a development proposal are subject to appeal.

Appeals filed with the City must comply with the appeal process established in Section 12-401-H of the Fresno Municipal Code, and in addition must be accompanied by supporting certification by a qualified registered engineer that capacity for service(s) exists as demonstrated by specific data and an analysis, in accordance with generally accepted engineering practices, all of which shall accompany the appeal.

Appeals will be to the Council, in accord with Section 12-401-H, except that only the applicant or his representatives may appeal to the Council, which appeal may be filed within 30 (instead of 15) days of the Director's notification of his findings; and provided further the appeal shall specify the good faith attempts of the applicant to resolve the issues on the appeal. All appeals must be finally determined prior to the application being deemed complete for further processing.

EXAMPLE FINDINGS

Project Number _____
Project Location _____
Project Description _____

1. Water

In compliance with the Woodward Park Community Plan Monitoring and Findings Procedures For Water Services, it has been demonstrated and determined that an adequate source of potable water exists to meet state and federal contaminate levels and that a sufficient source of water to meet state fire flow requirements is available and adequate to meet the needs of the above described Development as verified by _____

Public Works Director, and _____, Fire Chief

2. Sewer

In compliance with the Woodward Park Community Plan Monitoring and Findings Procedures for Sewer Services it has been determined that there will be adequate sewer capacity in the Herndon/Cornelia Trunk Sewer to serve the above described development application as verified by _____, Public Works Director.

3. Traffic

The Public Works Department has conducted a separate traffic review and has incorporated all recommended mitigation measures that are economically feasible into the project as verified by _____, City Traffic Engineer.

FINDING PROCEDURE FOR WATER SERVICE

With the submittal of any development application, (defined herein as any application for a rezoning, conditional use permit, site plan, subdivision or parcel map) the project applicant shall submit data upon which the water demand of the proposed development can be determined. This data must include the number and type of residential units and the proposed floor area and type of commercial and office use. A water availability analysis will be prepared by the Public Works Department and must be approved by the Public Works Director and the Fire Chief prior to approval of the development entitlement. The analysis must demonstrate that adequate water is available or will be available prior to issuance of an occupancy permit for the development. The finding that an adequate water supply will exist at occupancy may be conditioned upon the construction as a condition of approval of the entitlement, of certain water supply facilities prior to occupancy. The adequacy of the water supply shall be based on the following minimum standards and/or criteria.

1. The supply of potable water shall be permanent and shall satisfy all maximum contaminant levels established by federal, state and local agencies.
2. The supply shall provide adequate fire flows at the most remote public or private fire hydrant in the development with the following minimums:
 - a) Residential up to 5000 square feet per building--1500 gallons per minute at 20 psi pressure.
 - b) Commercial and residential over 5000 square feet--2500 gallons per minute at 20 psi pressure.
3. The maximum pressure assumed to be available in a transmission grid main for purposes of design of on-site water systems shall be 35 psi. The proposed development shall not cause the pressure in any transmission grid main serving that development to fall below 35 psi during peak use. All transmission grid mains shall have an inside diameter of 14 inches or more.
4. Flow and pressure determination in the transmission grid mains serving the entitlement shall consider all prior development entitlements at the density approved and shall assume that all services are connected and use the following volumes of water.

- a) Single Family, 2.12 gallons per minute per residence
 - b) Multi-Family, 1.51 gallons per minute per unit
 - c) Commercial, based on equivalent residential units determined from proposed uses on the property
5. A development entitlement shall be considered to be valid until the Development Department determines in writing based on provisions of the Municipal Code and the Subdivision Map Act that the entitlement is no longer in effect.
 6. The Public Works Department will use the above criteria to develop and maintain a computerized water flow model. The model, using Hardy Cross evaluation methods, will attempt to duplicate the conditions in the WPCP area and will predict the flow characteristics of the transmission grid main system (TGM) resulting from proposed development scenarios. The information developed by the model shall be made available for use by project applicants and their engineers to determine if an adequate supply of water is available for a proposed development.
 7. An applicant proposing a development may be required at his cost to provide flow tests at various locations in the existing TGM system for use by Public Works to determine availability of an adequate water supply.
 8. The applicant shall be required, prior to final approval of the entitlement, to provide security, in a form acceptable to the City Attorney, and later construct any facilities shown in the water availability analysis to be required for an adequate supply of water. The security will be released and the requirement to construct deleted if the facilities are constructed by others and placed in service.
 9. The applicant shall be responsible to evaluate the on-site distribution system and determine the minimum pressures which will exist within the proposed development.
 10. If the Public Works Director determines that groundwater contamination exists less than one mile upstream from a well providing primary service to a proposed development and and it is determined with reasonable certainty that maximum contaminant levels will be exceeded at the well, the applicant may be required to install well head treatment.

11. For subdivisions maps and parcel maps, approval of the tentative maps will be subject to the determination that an adequate supply of water will be available or made available at the time of issuance of an occupancy permit for the development. The conditions of approval of the tentative maps may include certain requirements related to provision of an adequate supply of water. In accordance with the provisions of Chapter 4.5 of the Subdivision Map Act, at the time of final approval of the map, other requirements may be imposed or the map may be denied if conditions are determined to exist which would be dangerous to the health or safety of the residents of the development or adjacent area.
12. The finding that an adequate supply of water will not be available at the time of occupancy of the development may be appealed to the City Council in accordance with Section 12-401-H of the Fresno Municipal Code provided such an appeal is accompanied by a study prepared by a licensed Civil Engineer showing that an adequate supply of water will be available at occupancy.
13. The minimum standards and criteria listed above shall be reviewed from time to time by the Public Works Director and with the approval of the Council will be revised as needed to reflect changing conditions.

FINDING PROCEDURE FOR SEWER SERVICE

With the submittal of any development entitlement application, (defined herein as any application for a rezoning, conditional use permit, site plan, subdivision or parcel map) the project applicant shall submit data upon which the Public Works Department can determine the quantity of wastewater flow from the proposed development. This data must include the proposed number and type of residential units on the site and the proposed floor area and type of office and commercial use. Public Works will prepare a sewer availability analysis to determine if there will be adequate sewer capacity in the Herndon/Cornelia Trunk Sewer for the proposed development at the time of issuance of an occupancy permit. Prior to approval of the development the analysis shall be reviewed and approved by the Public Works Director. The conditions of approval of an entitlement may include certain sewer facilities which will provide adequate sewer capacity at time of occupancy. The adequacy of capacity shall be based on the following criteria and/or standards.

1. A residential unit equivalent in the Bullard Community Plan area and the Woodward Park Community Plan (WPCP) area is based on the following assumptions:
 - a) Each person served in the Bullard and Woodward Park area will generate 105 gallons of sewage per day.
 - b) Each equivalent residential unit contains 2.79 persons.
 - c) Specific densities for residential uses are cited in Policy 1-3.7 of the WPCP.
 - d) Commercial flows will be calculated at 1750 gallons per day per acre.
 - e) A peaking factor of 1.5 will be used to determine maximum flows.
2. Sewage flows in the Herndon/Cornelia Trunk Sewer shall be monitored by the City on at least a semi-annual basis to determine the validity of the assumptions regarding a residential unit equivalent and to determine that flows do not exceed the capacity of the trunk.
3. Modification of the residential unit equivalent criteria for the Bullard and Woodward Park Community Plan areas may be made by the Public Works Department based on sewage flow monitoring and shall be subject to review and approval by the Council.

4. The Public Works Department will develop and maintain a computerized sewer model of the Herndon/Cornelia Trunk Sewer and the service area. The model will attempt to duplicate all existing development conditions in the service area including the portion of Clovis served by the trunk. Using residential unit equivalent criteria and Clovis sewage flow, the model will estimate the existing sewage flow in the trunk system. The model sewage flow will be compared with the actual flow as determined by the monitoring. The model will also estimate the remaining residential unit equivalents (available units which may be added to the trunk system) up-flow from selected points (nodes) along the trunk.
5. Capacity will be determined to not be available if the number of residential unit equivalents added by the proposed development, in addition to all residential units tentatively approved through development entitlements, exceeds the number of available units at any point in the trunk sewer as indicated by the sewer model.
6. It will be the objective of the City to construct capacity enhancements in the Herndon Trunk to eliminate existing constrictions, before estimated sewage flow from proposed development in the plan area exceeds the theoretical capacity of the trunk as determined by the sewer model. This construction and resulting capacity enhancement in the Herndon Trunk will be adequate to serve the Bullard and Woodward Park Community Plan areas as approved by the Council at the development density specified in the plans. Construction will be dependent upon funds collected from a proposed UGM sewer connection fee.
7. In the event the number of residential unit equivalents in a proposed development exceeds the maximum number of available units as determined by the sewer model and constriction relief in the Herndon Trunk has not been constructed by the City, the Developer may construct constriction relief or peak flow reduction facilities approved by the Public Works Director, provided the peak flow reduction facilities also benefit the users in the remainder of the trunk.

The Developer may construct in lieu of constriction relief or peak flow reduction, certain temporary on-site peak reduction facilities for the benefit of his property alone. However, these facilities shall not be subject to reimbursement and the owner shall

assume full responsibility for operation including the cost of maintenance as long as the facilities are in service.

The development entitlement application shall include an engineering evaluation and details of any proposal to enhance capacity.

8. In the event the Council approves a sewer connection fee for capacity enhancement in the Herndon Trunk and construction of the Grantland Trunk and the Public Works Director determines that a capacity enhancement facility proposed by a developer is specifically covered by that fee, the developer shall be reimbursed upon completion and acceptance of the facility in an amount equal to the actual cost of the facility but not to exceed the amount covered by the fee.
9. The available sewer capacity in the Cornelia Trunk will be determined in a manner similar to the Herndon Trunk and shall consider all existing and approved development in the Cornelia service area and any temporary service granted by the Council in the Grantland Service area. Development in the Bullard and Woodward Park Community Plan areas will have no more "right" to sewer capacity than development in the Cornelia Service Area and in the Grantland Service Area provided the Council approves temporary service. Development entitlements in any of the service areas will not be approved if sewer capacity in the Cornelia Trunk is not available.
10. The finding that adequate sewer capacity is not available in the Herndon or Cornelia Trunk Mains at the time of occupancy of the development may be appealed to the City Council in accordance with Section 12-401H of the Fresno Municipal Code provided such an appeal is accompanied by a study prepared by a licensed civil engineer showing that capacity will be available at the time of occupancy.
11. A development entitlement shall be considered to be valid until the Development Department determines in writing based on provisions of the Municipal Code and the Subdivision Map Act that the entitlement is no longer in effect.

FINDING PROCEDURE FOR TRAFFIC CIRCULATION

Prior to the submittal of any development application (defined herein as any application for a rezoning, conditional use permit, site plan, subdivision or parcel map) the project applicant shall submit data to demonstrate that public street capacity is available to accommodate the proposed project. Prior to approval of the development entitlement, the data shall be reviewed and approved by the Public Works Director. The finding that public street capacity is adequate may be conditioned upon construction of certain street improvements prior to completion of the development. The adequacy of capacity shall be based on the following criteria and/or minimum standards:

1. The proposed project shall, to the extent economically feasible, conform to the circulation policies and implementation measures contained in Sections 3-1.1, 3-2.1 through 3-2.5, 3-3.1 through 3-3.8, 3-4.1 through 3-4.11, and 3-5.1 through 3-5.5 of the Woodward Park Community Plan.
2. The conditions of approval of the development entitlement shall comply with all provisions of the UGM Policy and the Municipal Code pertaining to the major street system.
3. Notwithstanding the provisions of the UGM Street Policy, traffic generated by the proposed development shall not produce a condition where the current capacity of existing collector and arterial streets, not completed to planned width, providing the primary traffic service within two miles of the development would be exceeded. If the City Traffic Engineer determines that the capacity of these existing major streets, in their present condition, will be exceeded as a result of the proposed development, the development applicant shall be responsible for measures to mitigate the effects of exceeding the capacity of the street.
4. For all non-residential projects greater than five acres in size for which a traffic study has not been performed, located within one mile of any intersection projected by the City Traffic Engineer to experience an "E" or "F" level of service, a traffic study shall be completed that identifies mitigation measures designed to mitigate project related traffic impacts.

In addition, the following streets which have been identified in the Woodward Park Community Plan as having insufficient traffic capacity, shall be included in the traffic study. The development applicant shall

In addition, the following streets which have been identified in the Woodward Park Community Plan as having insufficient traffic capacity, shall be included in the traffic study. The development applicant shall be responsible for implementing the measures approved by the Council.

Herndon Avenue - Blackstone to Chestnut

First - Herndon to Alluvial

Blackstone - Herndon to Nees

Alluvial - Blackstone to Millbrook

Friant Road - Nees to Audubon

LIST OF POSSIBLE MITIGATION MEASURES

Water

Dedication or acquisition of a water well site.
Construction of a water well.
Well head treatment.
Extension of Transmission Grid Mains.
Construction of Recharge Facility.

Sewer

Constriction relief on Herndon Trunk
Peak reduction facilities.

Circulation

Major street construction in excess of UGM policy.

Traffic signals.

Intersection improvement (added travel lanes, turn lanes, traffic signals, etc.)

Improvements to Herndon Avenue to include but not limited to the following:

- a) Computerized signal coordination from Blackstone to Willow.
- b) Construction of a six lane facility with dual left turn lanes at each major street intersection - Blackstone to Willow.
- c) Widening of major street intersection to provide full width approach roadways with bus stops and dual left turn lanes.
- d) Construction of fly-overs at most impacted intersections when level of service E is exceeded.

Official Plan Line for Chestnut/Maple arterial street from Alluvial to Cooper.

Extension of Willow Avenue from Barstow to Herndon Avenue.

EXHIBIT "D-3" MONITORING CHECKLIST

WATER

- Implement policies 7-3.1 through 7-3.13 and 8-1.1 through 8-1.9 of the Development Department recommended plan, as provided for in Exhibits D-1, D-2 and D-3 of the resolution certifying EIR No. 10100.

SEWER

- Payment of sewer trunk fees for new development in accordance with the Municipal Code.
- Implement plan policies 6-1.2, 6-1.3, 6-2.1 and 7-2.1 through 7-2.8 to assure that sewer flows generated by urban development will not exceed capacity.
- Implement water conservation plan policy 7-3.2 to reduce water consumption and the generation of waste water.

TRAFFIC

- Implement the plan concept of the Woodward Park Community Plan Update and related policy/implementation measures to establish balanced land uses with supportive circulation and transportation facilities in order to reduce vehicle travel and congestion. (Policies and Implementation Measures under the Land Use, Circulation and Transit Sections).

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RESPONSE

- [illegible]

- o Implement circulation policies/implementation measures of the Woodward Park Community Plan which will reduce exposure to vehicular generated noise (Policies 3-3.4, 3-3.6, 3-3.7, 3-3.8, 3-4.4, 3-4.5, 3-4.6 and 3-4.10).
- o Implement noise policies/implementation measures of the Woodward Park Community Plan (Policies 8-3.1, 8-3.2, 8-3.4, 8-3.5 and 8-3.6).
- o Require that all fences and walls constructed for residential uses which back or side onto major streets without a frontage road meet the standards of Fresno Municipal Code Section 12-306-N-19.

- o Continued implementation of Urban Growth Management and property development standards which discourage the premature development of land due to the cost of extending urban service facilities.
- o Designation of agricultural/urban reserve areas which are converted to urban uses only in accordance with growth and public facility policies of the staff alternative plan.
- o Utilize major streets where possible as boundaries between areas designated for urban development and urban reserve.
- o Designate open space uses along the San Joaquin River and apply Bluff Preservation (BP) Zone District standards.

- o Implement the objectives and policies of the 1984 Fresno General Plan Energy Conservation Element.

- o Implement mitigation measures previously identified in the Flood Control Districts 1985 District Service Plan EIR and NURP Project Report and reviewed in this document.
- o Implement policies 7-42, 8-41 and 8-4.2 of the plan update.

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In order to provide adequate funding for capital improvements over the next five years and beyond the School District may have to consider the following mitigative measures.

- o Implement fee required by the Clovis Unified School District.
- o Pursue the approval of an additional local general obligation bond measure.
- o Continue to participate in statewide efforts to obtain additional funding from state, such as general obligation bonds, or federal sources.

0 Implementation of existing policies and standards as well as the plan update policies/implementation measures related to land use relationships, circulation and traffic capacity, provision of public facilities and management of water resources.

- o Consider alternative funding sources to provide and equip and new police changing stations.

Consider alternative funding sources to provide library facilities.

[illegible]

RESOLUTION NO. 2000-329

A RESOLUTION OF THE COUNCIL OF THE CITY OF FRESNO,
CALIFORNIA, AMENDING THE WOODWARD PARK COMMUNITY
PLAN (PLAN AMENDMENT APPLICATION NO. A-00-013)

WHEREAS, on December 5, 1989, by Resolution No. 89-464, the City Council adopted the Woodward Park Community Plan; and,

WHEREAS, Scott Ellis Jr., Ellis Enterprises, has filed an application to amend Plan Policy No. 1-4.3-f as it relates to Office Commercial land use, creating an exception to the maximum height limit of 20 feet in order to allow a 28-foot 4-inch high single story office building on a 1.81 acre parcel located on the northwest corner of North Cedar and East Alluvial Avenues; and,

WHEREAS, the environmental assessment conducted for the proposed plan amendment resulted in the filing of a negative declaration; and,

WHEREAS, on November 1, 2000, the Fresno City Planning Commission held a public hearing to consider Plan Amendment Application No. A-00-013, and the negative declaration for Environmental Assessment No. A-00-013 dated October 6, 2000; and,

WHEREAS, the Fresno City Planning Commission took action to recommend approval of Plan Amendment Application No. A-00-013 as proposed by the applicant and recommended approval of the related negative declaration for Environmental Assessment No. A-00-013; and,

WHEREAS, on November 14, 2000, the Fresno City Council held a public hearing to consider Plan Amendment Application No. A-00-013 and determined, based upon information presented at the hearing and upon review and consideration of the environmental documentation provided that the adoption of the proposed amendment is in the best interest of the City of

Fresno.

Adopted _____
Approved _____
Effective _____

2000-329

Council Resolution
Plan Amendment Application No. A-00-013
Page 2
November 14, 2000

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Fresno as follows:

1. That Council finds based upon its own independent judgment, that there is no substantial evidence in the record that Plan Amendment Application No. A-00-013 may have a significant effect on the environment and hereby adopts the negative declaration dated October 6, 2000, prepared for this project.

2. The Council of the City of Fresno hereby adopts Plan Amendment Application No. A-00-013, amending Woodward Park Community Plan Policy No. 1-4.3-f to create an exception to the maximum height limit of 20 feet in order to allow a 28- foot 4-inch single story office building on the 1.81 acre parcel located on the northwest corner of North Cedar and East Alluvial Avenues as depicted on Exhibit A, attached hereto and incorporated herein by reference.

LRJ:lcl:\K\Common\CC\A-00-013-CRS

CLERK'S CERTIFICATION

STATE OF CALIFORNIA)
COUNTY OF FRESNO)
CITY OF FRESNO)

I, REBECCA E. KLISCH, City Clerk of the City of Fresno, certify that the foregoing Resolution was adopted by the Council of the City of Fresno, California, at a regular meeting held on the 14th day of NOVEMBER, 2000, by the following vote:

Ayes:	Bredefeld, Mathys, Perea, Quintero, Ronquillo, Steitz, Boyajian
Noes:	None
Absent:	None
Abstain:	None

REBECCA E. KLISCH
City Clerk

By Rebecca E. Klisch
~~Deputy~~

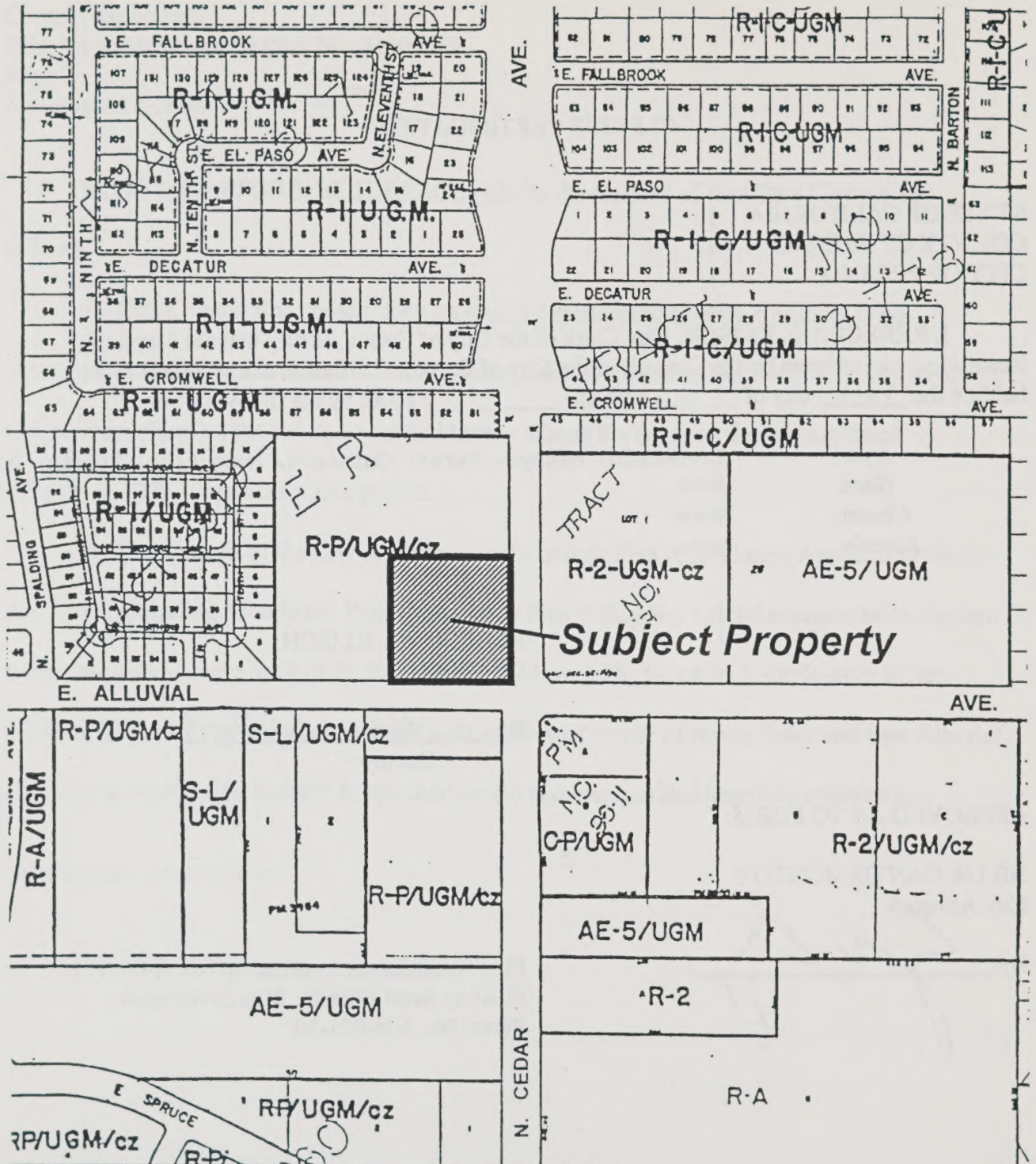
APPROVED AS TO FORM:

HILDA CANTU MONTTOY
City Attorney

By [Signature]

Plan Amendment Application No. A-00-013
Filed by Scott Ellis Jr., Ellis Enterprises
Parcel No. 404-021-30

EXHIBIT A



VICINITY MAP

PLAN AMENDMENT NO. A-00-013
Amend Woodward Park Community Plan Policy
No. 1-4 3f as it relates to Office Commercial land use,
creating exception to the maximum height limit of
20 feet for property at 7525 N. Cedar Avenue



NOT TO SCALE

**DEVELOPMENT DEPARTMENT
PLANNING DIVISION**

APN 404-021-30

ZONE MAP. 1651

BY/DATE JS / 10-17-00

ENVIRONMENTAL CHECKLIST

WOODWARD PARK

EA No. COMMUNITY PLAN UPDATE

Potential Environmental Effects1.0 TOPOGRAPHIC, SOIL, GEOLOGIC CONSIDERATIONS

- 1 1.1 Geologic hazards, unstable soil conditions
2 1.2 Adverse change in topography or ground surface relief
1 1.3 Destruction of unique geologic or physical features
1 1.4 Increased water erosion

2.0 AIR QUALITY

- 3 2.1 Substantial indirect source of pollution (large vehicle generator)
1 2.2 Direct on-site pollution generation
1 2.3 Generation of objectionable odors
1 2.4 Generation of dust except during construction
1 2.5 Adverse local climatic changes

3.0 WATER

- 3 3.1 Insufficient ground water available for long-term project use
3 3.2 Use of large quantities of ground water
2 3.3 Wasteful use of ground water
2 3.4 Pollution of surface or ground water supplies
3 3.5 Reduction in ground water recharge

4.0 PLANT LIFE

- 1 4.1 Reduction of the numbers of any unique, rare, or endangered species
2 4.2 Reduction in acreage of agricultural crop
3 4.3 Premature or unnecessary conversion of prime agricultural land

5.0 ANIMAL LIFE

- 1 5.1 Reduction in the numbers of any rare unique, or endangered species
1 5.2 Deterioration or displacement of valuable wildlife habitat

6.0 HUMAN HEALTH7.0 NOISE

- 2 7.1 Increases in existing noise levels
2 7.2 Exposure to high noise levels

8.0 LIGHT & GLARE

- 2 8.1 Production of glare which will adversely affect residential areas
2 8.2 Exposure of residences to high levels of glare

9.0 LAND USE

- 1 9.1 Incompatibility with adopted plans and policies
1 9.2 Acceleration of growth rate
1 9.3 Induces unplanned growth
1 9.4 Adverse change in existing or planned area characteristics

10.0 TRANSPORTATION & CIRCULATION

- 3 10.1 Generation of vehicle traffic sufficient to cause capacity deficiencies on existing street system
3 10.2 Cumulative increase in traffic on a major street for which capacity deficiencies are projected
1 10.3 Specific traffic hazard to motorists, bicyclists, or pedestrians
1 10.4 Routing of non-residential traffic through residential area
1 10.5 Insufficient or poorly located parking
1 10.6 Substantial increase in rail and/or air traffic

11.0 URBAN SERVICES

- 2 11.1 Availability of fire protection
2 11.2 Lack of emergency vehicle access
1 11.3 Adequacy of design for crime prevention
3 11.4 Overcrowding of school facilities
2 11.5 Availability of water mains of adequate size
3 11.6 Availability of sewer lines of adequate capacity
1 11.7 Availability of storm water drainage facilities (on or off site)
2 11.8 Availability of adequate park and recreation areas
1 11.9 Unusually high solid waste generation

12.0 HAZARDS

- 1 12.1 Risk of explosion or release of hazardous substances
2 12.2 Site subject to flooding
1 12.3 Adverse change in course of flow of flood waters
1 12.4 Potential hazards from aircraft accidents
1 12.5 Potential hazards from landfill and/or toxic waste sites

13.0 AESTHETICS

- 1 13.1 Obstruction to public or scenic vista or view
1 13.2 Creation of aesthetically offensive conditions
1 13.3 Removal of street trees or other valuable vegetation
1 13.4 Architectural incompatibility with surrounding area

14.0 HISTORICAL/ARCHEOLOGICAL

- 1 14.1 Removal of historic building, disruption of archeological site
1 14.2 Construction or activity incompatible with adjacent historic site

15.0 ENERGY

- 3 15.1 Use of substantial amounts of fuel or energy
1 15.2 Substantial increase in demand upon existing sources of energy
1 15.3 Wasteful use of energy

See reverse side for explanation of ratings

ENVIRONMENTAL CHECKLIST

Explanation of Ratings

- "0" Insufficient Information--Insufficient information is available to determine the potential environmental effects which may result from the proposed project in this category.
- "1" No Significant Environmental Effect--The proposed project will not have an adverse environmental effect in this category, or any such effect is not substantially unusual or of undesirable magnitude. This rating is also utilized in cases where the category is not applicable to the particular project under consideration.
- "2" Moderate Environmental Effect--The proposed project will have an adverse environmental effect in this category which is of sufficient magnitude to be of specific concern. However, this effect is not substantial enough in itself to require the preparation of an Environmental Impact Report.
- "3" Significant Adverse Environmental Effect--The environmental effect identified in this category substantiates in itself or contributed toward a finding that the proposed project has a potentially significant adverse effect on the environment sufficient to require the preparation of an Environmental Impact Report.

APPENDIX-C

ANALYSIS OF AND RECOMMENDATIONS REGARDING
THE HERNDON AVENUE SEWER STUDY

On August 23, 1989, the Council determined that a relief sewer main in Herndon Avenue should not be constructed as proposed in the Northeast Feasibility Study prepared by Boyle Engineering. This relief sewer would provide sewer service to the "starred area" at the density levels (medium, 10 units per acre) proposed in the 1985 General Plan and to the additional area proposed for development by Clovis. The Council directed staff to determine the amount of additional urban development which could be served by the existing Herndon Trunk Sewer considering certain low cost capacity enhancements in lieu of a separate relief sewer. Although not specifically addressed it is assumed that added capacity for Clovis would not be provided.

Staff, on November 8, 1988 advised the Council of its opinion that an independent analysis of the Herndon Trunk Sewer by a consultant would be advisable to affirm the sanitary sewer design criteria used by staff. The study would evaluate existing and future sewer service and possible capacity enhancements to determine the amount of additional development which could be served by the sewer system. The Building Industry Association (BIA) expressed its willingness to participate in the study, by advising staff that it may pay for up to one half of the cost of the study.

On December 20, 1988, the Council approved a consultant agreement with Black and Veatch Engineers to perform the study.

The study was completed on March 8, 1989 with supplemental data presented on March 29, 1989. The Council has been supplied copies of the Final Report and the supplemental data. Copies of the Report have been made available to the public upon request.

Attached as Exhibit "A" is a copy of the Executive Summary of the Report. Staff would further summarize the findings of the Report as follows:

1. The sanitary sewer design criteria used by Fresno is consistent with that used by seven other valley cities.

However, Black and Veatch recommends design criteria for the Herndon Trunk which produces an approximate 20%-25% decrease in the design flow in the pipe from that estimated by staff using current design criteria. This results in a corresponding increase in the number of residential units that can be served by the pipe.

2. Flows in the existing Herndon Trunk were monitored by Black and Veatch. When considered along with flow data from the City's ongoing flow monitoring program and commercial water usage records, the following unit wastewater characteristics were used for the analysis of the Herndon Trunk:
 - a) per capita unit flow of 95 gallons per day (gpcd) for dry weather
 - b) 105 gpcd for wet weather
 - c) peaking factor of 1.5
 - d) commercial and industrial flows of 1550 gallons per acre per day (gpac) and 1140 gpac for institutional facilities (schools)
3. Several development scenarios were considered. Full buildout of the Herndon Service area at current single family residential densities cannot be accommodated by the existing trunk sewer.
4. Capacity enhancements include water conservation, equalization facilities, and relief sewers (short reaches of parallel pipes at constriction points). Relief sewers are generally the least expensive measure for capacity enhancement.
5. Continued monitoring of flows and more detailed analysis of capacity enhancement alternatives are recommended prior to selection of any capital improvement plan.

Staff has analyzed the Herndon Sewer Study and presents the following information for consideration by the Council.

Sewer Design Criteria

The design criteria for the Herndon Trunk recommended by Black and Veatch is not conservative relative to resulting pipe size. Although the Report indicates Black and Veatch typically recommends designing a sewer to flow 3/4 full at peak flow, the analysis of the trunk sewer uses the City's current standard design of full pipe at design peak flow. The criteria allows very little if any safety factor and is based on the actual flow characteristics of the partially full existing pipe. The design criteria reflects the life style and character of this neighborhood which is not identical to other parts of the City. These characteristics may also change in the future.

In order to compare the design criteria used by Fresno, other valley cities and by Black and Veatch, both in the report and in other more general designs provided by their firm, staff estimated the flow and

pipe size which would result from each set of design criteria for a hypothetical situation. We assumed a community of 10,000 medium density residential units, 1,000 medium-high units, and 200 acres of general commercial property. Following is a comparison of the results of each design criteria alternative:

	<u>Design Flow</u> (mgd)	<u>Estimated Pipe</u> <u>Size Needed</u>
Fresno	4.15	24"
Stockton	3.89	24"
Merced	2.85	21"
Modesto	5.20	27"
Bakersfield	5.58	27"
Lodi	3.59	24"
S & F SD	3.28	24"
Black & Veatch general criteria	5.60	27"
Black & Veatch Herndon Study	2.99	21"

Of the nine design criteria alternatives, the Black and Veatch design factors used in the Herndon study would estimate a design flow which is 27% lower than the average of the seven other communities. Their "book" flow would be the highest of the alternatives studied. Three of the alternative designs would recommend a 27" pipe, four would recommend a 24" pipe, and two, including Black and Veatch, would recommend a 21" pipe.

Fresno's staff developed design criteria is about in the middle. The design flow is 1.7% above the average of the other cities. We would recommend a 24" pipe to serve this hypothetical community.

Study Scenarios

The capacity analysis in the study determines the current capacity of the Herndon Trunk and estimates the capacity available to serve additional development. Three service levels were modeled by Black and Veatch using computer techniques.

- Level 1 - Committed--Existing development and proposed development with approved building permits.
- Level 2 - Entire Service Area--Proposed development at low density (1668 acres) and medium low (2462 acres). Acres listed are in or east of the service area of sewer main in Cedar Avenue.
- Level 3 - Partial Service Area--1600 acres not to be developed. Remaining area developed at low density (286 acres) and medium low (2264 acres).

Details of the three service levels modeled by Black and Veatch are shown on attached Exhibit "B".

Subsequent to receipt of the Report, staff duplicated the computer sewer model used by Black and Veatch and entered the model and design criteria into the City's computer. We are able to evaluate a land use scenario and obtain identical results as Black and Veatch. The following service level scenarios were modeled by staff.

Level 4 - The Woodward Park Plan Update Committee has proposed a land use plan which provides for full development of the service area at a higher density than proposed in the Black and Veatch Level 2. This land use proposal contains 3990 acres of medium-low density development in or east of the Cedar Avenue service area. The results of modeling of the wastewater flow on the City's computer is shown on Exhibit "B".

Level 5 - The City of Clovis is now entitled to 4.0 mgd peak flow in the Herndon Trunk. They "purchased" that entitlement at the time the Herndon Trunk was funded and constructed. In a letter dated March 24, 1989, Clovis requests that an additional 10.50 mgd peak flow be accommodated in any enhancement of capacity of the Herndon Trunk. This flow in itself would require the equivalent of a parallel 33 inch diameter pipe.

Staff has combined the wastewater flow resulting from the Woodward Park Plan Update Committee land use proposal and the Clovis request in an evaluation of the Trunk. See attached Exhibit "B" for the results. The following parallel relief sewer would be required:

Willow to Cedar	-	33"
Cedar to First	-	36"
First to Teilman	-	39"
Teilman to Cornelia	-	42"

The estimated cost of the relief sewer would be \$11,167,000. Based on the following formula the Fresno share of the cost would be \$3,446,000:

Fresno share of each reach of pipe (%) =
$$\frac{\text{Capacity of Pipe (mgd)} - 10.5 \text{ mgd}}{\text{Capacity of Pipe (mgd)}}$$

With this cost sharing formula, Fresno would be purchasing all capacity in excess of the Clovis flow.

Capacity Improvements

The Report discusses and compares several capacity improvement alternatives. The most viable are water conservation, equalization basins (peak flow storage) and parallel relief sewers. Black and Veatch state that relief sewers are generally the least costly measures for capacity enhancement. The Report states that these alternatives are preliminary and should be subjected to more rigorous engineering analysis prior to final selection and implementation. Although the report indicates that for the Herndon Trunk a combination of equalization facility and relief sewers is the most economical, staff has chosen to continue the analysis of the additional service levels assuming the use of relief sewers. This would somewhat mitigate the fact that the Black and Veatch design criteria has little margin of safety. The cost of a relief sewer is far easier to determine and incorporate into the sewer model.

The cost to provide the capacity enhancement necessary to accommodate the wastewater flow at each service level is listed below:

	<u>Cost of Added Capacity (Relief Sewers)</u>
Level 1 - Existing	-0-
Level 2 - Full Buildout (low density)	\$2,210,000
Level 3 - Partial Buildout Community Plan Proposal	\$1,080,000
Level 4 - Full Buildout--Medium Low Density Committee Proposal	\$3,106,000
Level 5 -Level 4 with Added Clovis Flow	\$3,446,000*

* Clovis Cost = \$7,722,000

Grantland Trunk

The Study covered only the Herndon Avenue portion of the Herndon/Cornelia Trunk Sewer. The portion of the system south of Highway City in Cornelia Avenue does not increase in capacity. Our sewer model shows that portion of the Cornelia Trunk will reach capacity approximately the same time as the Herndon Trunk. The Herndon/Cornelia system was not designed to provide sewer capacity to all of the area through which it passes. Connections to the system have been made in areas generally furthest from the treatment plant (Herndon portion). This, of course, makes logical sense because it

would be less expensive to provide relief to the area closest to the plant (Cornelia portion). However, staff is of the opinion that the Herndon Service Area has no more "right" to be served by the line than does the Cornelia Service Area. Therefore, it is also our opinion that the Herndon Service Area (and Clovis) should participate in the cost of relief of the Cornelia portion of the line along with the Cornelia Service Area. The way to provide relief to the Cornelia Trunk and to provide service to the area west of Polk Avenue is to construct a trunk sewer in Grantland Avenue including the Grantland Avenue Connector, from Herndon Avenue at Cornelia Avenue to the treatment plant. The trunk would be sized to accommodate all of the wastewater in the Herndon Trunk east of Cornelia, as well as the Grantland Service Area. The Cornelia Trunk would be free to provide service to the Cornelia Service Area.

It is staff's opinion that each of the service areas, Herndon, Cornelia, and Grantland should share in the cost of providing additional capacity in the Cornelia Trunk through the Grantland Trunk. The Herndon and Cornelia Service Areas should participate because at full buildout of the service area relief would be needed. Grantland Service Area can only be served by adding a new facility. We also believe that the Herndon Service Area should begin contributing as soon as a fee schedule can be approved and implemented. UGM sewer fees that are presently in effect in the Cornelia and Grantland Service Area should be raised to cover current costs and concepts.

The basis of the cost sharing should be the subject of discussion. The BIA has expressed a preliminary view that the charge should be equal for all development; development in the Northeast Growth Area should pay the same as that in the West Growth Area. They believe even development in the non-UGM area served by another system should be required to pay a unit trunk sewer charge considered as charge for those facilities constructed with funds other than developer fees. The BIA contends that everyone benefits from fringe development and all development should assist in construction of facilities serving those areas. X

Another concept is what has been presented in other discussions as the "building block" approach. A certain service area, perhaps the one furthest from the plant, has the responsibility to construct a main to the treatment plant. A second downstream service area adds waste water to the trunk and would be responsible for the cost of an increased pipe size. A third service area would be responsible for the cost of the next upsizing of the trunk.

A third concept is that the cost would be shared based on flow each service area adds to the trunk relative to the total capacity of the pipe.

For discussion and comparison purposes, staff used the unit charge concept to determine approximate fees for various service levels. Staff estimated the magnitude of a connection charge based on the estimated cost of capacity enhancement of the Herndon Trunk by

relief sewers and the estimated cost of the Grantland Trunk for service level Nos. 2, 4, and 5. The estimated costs are as follows:

	<u>Herndon Enhancement</u>	<u>Grantland Trunk</u>	
Level 2 - Full Buildout (low density)		\$2,210,000	\$21,354,000
Level 4 - Committee Proposal		3,106,000	21,401,000
Level 5 - Level 4 and Clovis Flow		3,446,000	*22,913,000
*Fresno Share = \$18,270,000			
Clovis Share = 4,643,000			

Estimated Trunk Sewer Charges

Following is a listing of the criteria used to estimate a unit-based trunk sewer fee for the Herndon, Cornelia and Grantland Service Areas:

	<u>Number of Units</u>				<u>Total Cost</u>	<u>Unit</u>	<u>Est.</u>
	<u>Herndon</u>	<u>Cornelia</u>	<u>Grantland</u>	<u>Total</u>	<u>Grantland</u>	<u>Cost</u>	<u>Fee/Unit</u>
						<u>Capital</u>	<u>for Bond</u>
							<u>Financed</u>
Level 2	20,285	33,618	46,521	100,424	23,354,000	233	700
Level 4	24,869	33,618	46,521	105,008	24,507,000	233	700
Level 5	24,869	33,618	46,521	105,008	21,716,000	207	670

From the above data, it is staff's opinion that a trunk sewer connection charge amounting to approximately \$500 per equivalent residential unit should be put into effect immediately on all development in the Herndon, Cornelia and Grantland Service Areas. Further, we propose that the major facility charge be raised from \$200 per unit to \$400. The proceeds the major facilities this charge would be divided equally to cover the cost of expansion of the Wastewater Plant and trunk sewer construction. (There will be a need in the future to consider an additional increase to fund plant expansion).

Attached Exhibit "D" contains summary discussion of Trunk Sewer Financing Concepts prepared by staff in a study of Fowler Trunk Sewer capacity alternatives dated April 28, 1988. Staff believes these concepts should be pursued.

CONCLUSIONS AND RECOMMENDATIONS

Flow Monitoring

Because of the very small safety factor the Black and Veatch design provides, staff is of the opinion that it is essential that flow in the system be closely monitored. The City's sewer model for Herndon will be adjusted to reflect this design criteria. Work will be done to verify that the number of existing units estimated by Black and

Veatch is accurate. As units are added, the model will be adjusted. The resulting estimated flow will be checked against measurement of actual flows in the pipeline. Particular attention will be taken to check the peaking factors which, in staff's opinion, are quite low. As we find out more about the characteristics of the flow, the design criteria may need to again be revised.

Staff does not believe that the design criteria used for other trunk systems should be adjusted.

We also feel it is essential that with almost all development proposals, Council be given a summary of the number of units added to the system after this report, the remaining available units and the number of units the proposal would add. Staff will develop a form for this "scoresheet" which we feel will assist in keeping track of capacity in the system.

Fee Structure

If there is to be any development in the starred area, a certain amount of capacity enhancement is needed. Staff recommends that the Herndon Service Area share in the cost of the Grantland relief. A fee of \$500 per equivalent residential unit and an increase in the major facilities charge of \$200 per unit to \$400 would support a bond financing program.

Woodward Park Community Plan

Staff recommends that both introduced plans be evaluated considering sewer services along with the other issues. The difference in costs of capacity enhancement between the staff's proposed plan and the Committee's proposal amounts to approximately \$2,000,000.

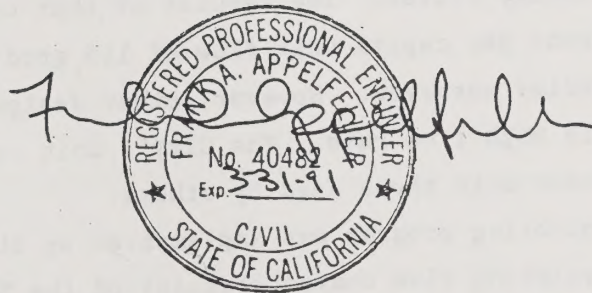
MDJ/SEDP/PW540

Attachments:

1. Exhibit "A" - Executive Summary of Herndon Study
2. Exhibit "B" - Comparison of Service Level Models
3. Exhibit "C" - Trunk Sewer Location Map
4. Exhibit "D" - Financing Concepts

CITY OF FRESNO, CALIFORNIA HERNDON AVENUE TRUNK SEWER STUDY

FINAL REPORT



Black & Veatch
ENGINEERS-ARCHITECTS

WALNUT CREEK, CALIFORNIA

MARCH 8, 1989

1. EXECUTIVE SUMMARY

Black & Veatch was retained by the City of Fresno and the Building Industry Association (BIA) of the San Joaquin Valley to determine the available capacity of the Herndon Avenue trunk sewer and to recommend measures to enhance this finite limit.

Future development for the Herndon Avenue trunk sewer service area is expected to derive from the Bullard Community Plan area and the Woodward Park Community Plan area.

The Herndon Avenue trunk sewer is located in the northern section of Fresno and runs from east to west along Herndon Avenue. The trunk sewer is 8.03 miles long and is constructed of reinforced concrete pipe. The City of Fresno operates two flow meters at each end of the trunk sewer: one at Willow Avenue and Herndon, and one at Blythe Avenue and Herndon.

The sanitary sewer design criteria currently used by the City of Fresno were compared with the sanitary sewer design criteria used by seven other Central Valley cities. The results of that comparison indicate that the City's current per capita unit flow of 115 gpcd is higher than all cities and agencies surveyed. However, other design criteria used by the City offset this high flow rate. The City's unit commercial flow of 1,750 gpad is consistent with those used by others.

A flow monitoring program was implemented by Black & Veatch to determine the existing flow characteristics of the Herndon Avenue trunk sewer service area. When considered with flow data from the City's ongoing flow monitoring program and from a review of commercial water usage records, the results yielded the following unit wastewater characteristics: (1) per capita unit flows of 95 gallons per capita per day (gpcd) for dry weather and 105 gpcd for wet weather; (2) a peaking factor of 1.5; and (3) unit commercial and industrial flows of 1,550 gpad and unit institutional (e.g., schools) flow of 1,140 gpad.

Zoning and sewer maps were used to subdivide the Herndon Avenue trunk sewer service area into 21 individual drainage basins. From land use characteristics and proposed zoning, existing and future population estimates for each drainage basin were developed for three development

levels: (1) buildout of development with issued building permits; (2) buildout of the entire service area including the Bullard and Woodward Park Community plan areas; and (3) buildout of the service area excluding a portion of the Northeast Growth Area. These population figures were used in conjunction with sanitary sewer model BVSWR to determine the capacity capabilities of the Herndon Avenue trunk sewer.

From the results achieved with BVSWR, Black & Veatch has determined that the Herndon Avenue trunk sewer has some capacity limitations for the Full and Partial Buildout scenarios modeled for this study. These capacity restrictions are enumerated in Table 6-1. Preliminary capacity enhancement alternatives presented herein to aid in decision-making include water conservation, equalization facilities, and relief sewers. Preliminary cost analysis indicates that provision of relief sewers is generally the least cost measure for capacity enhancement. Continued monitoring of flows and more detailed analysis of capacity enhancement alternatives is recommended prior to selection of any capital improvement plan.

6. CAPACITY IMPROVEMENT ALTERNATIVES

The capacity analysis summarized in Section 5 indicates capacity shortfalls under both Service Level 2 (Service Area Buildout) and Service Level 3 (Partial Service Area Buildout) flow conditions. This section presents capacity enhancement alternatives for the Herndon Avenue trunk sewer to address capacity requirements for the future development levels. It is important to note that the alternatives and analysis presented herein are preliminary and should be subjected to more rigorous engineering analysis prior to final selection and implementation of an apparent best plan.

Because of the hydraulic characteristics of circular pipe, the actual maximum capacity of a sewer is about 105 percent of the full capacity. Therefore, for this study a shortfall is assumed to occur when the computer model indicates that a sewer reach is at greater than 105 percent full under the modeled conditions. Based on this criteria, capacity shortfalls for the Levels 2 and 3 without capacity improvements are summarized in Table 6-1.

TABLE 6-1. CAPACITY SHORTFALLS WITHOUT IMPROVEMENTS

Upstream Manhole Number	Downstream Manhole Number	Pipe Length (feet)	Pipe Diameter (inches)	Capacity Shortfall (mgd)	
				Level 2	Level 3
380	370	2,639	42	2.00	
370	360	1,800	42	2.96	1.48
360	350	1,368	45	2.33	0.85
330	320	2,642	45	1.22	
320	310	970	45	1.37	
300	290	1,589	45	5.25	3.76
250	241	927	45	3.14	1.64
230	221	574	45	2.97	1.49

CAPACITY ENHANCEMENT APPROACHES

Capacity enhancement approaches include peak flow reduction and capacity expansion. Peak flow reduction alternatives include water conservation programs and flow equalization, while capacity expansion includes sewer replacement and relief sewers.

Water Conservation

Wastewater flow can be reduced by encouraging water conservation. The most popular conservation measures are programs which require installation of low-flow plumbing fixtures, primarily showerheads, toilets, and faucets. These measures are estimated to save 8 to 10 gpcd in wastewater flow.

Flow Equalization

Flow equalization involves diversion and storage of sufficient flow during peak flow periods to prevent sewer surcharging. Stored flow is returned to the sewer during low flow periods. Storage is most often accomplished with in-line storage in pump station wetwells or sewers and off-line storage in equalization basins.

Capacity Expansion

Capacity expansion is normally accomplished using replacement or parallel relief sewers. A replacement sewer would normally be provided only in the event of severe physical deterioration of the existing sewer. Parallel relief sewers are most commonly provided for capacity expansion. A relief sewer is constructed such that during peak periods flow is diverted from the upstream end of the undersized sewer to the parallel sewer, thereby relieving any surcharging which might occur.

Approaches which appear to be most viable for the Herndon Sewer include:

- Water Conservation - Retrofit of existing connections and fitting of new connections with low-flow plumbing fixtures, resulting in a reduction of 8 gpcd and a wet weather unit residential flow of 97 gpcd.
- Equalization Basin(s) - Provide an off-line flow equalization facility upstream of Manhole 380 (east of First Avenue). The

equalization facility will include pumping, storage basins, and aeration facilities to maintain solids in suspension, and to prevent the sewage from turning septic and producing odors. Equalization basins would be sized to relieve the most surcharged sewer during peak wet weather flow conditions.

Parallel Relief Sewers - Install parallel relief sewers to relieve reaches where the estimated peak wet weather flow exceeds 105 percent of the full capacity of the existing sewer. Relief sewers would be designed such that flow levels in both sewers do not exceed 75 percent full at peak wet weather flow.

CAPACITY ENHANCEMENT ALTERNATIVES

To aid in decision-making, capacity enhancement alternatives have been formulated from the above approaches. Computer modeling indicates that water conservation measures alone will not relieve sewer surcharging for Level 2 and Level 3 development; capacity shortfalls where the total PWWF exceeds 105 percent of sewer capacity assuming 8 gpcd flow reduction from water conservation measures, are indicated in Table 6-2.

TABLE 6-2. CAPACITY SHORTFALLS WITH WATER CONSERVATION

Upstream Manhole Number	Downstream Manhole Number	Pipe Length (feet)	Pipe Diameter (inches)	Capacity Shortfall (mgd)	
				Level 2	Level 3
380	370	2,639	42	1.11	
370	360	1,800	42	1.98	
360	350	1,368	45	1.35	
300	290	1,589	45	3.94	2.56
250	241	927	45	1.70	
230	221	574	45	1.50	

Capacity enhancement alternatives for consideration for Levels 2 and 3 include the following:

Alternatives 2-1 and 3-1:

Water Conservation Program with Equalization Facility. Implement a water conservation program and provide an equalization facility for remaining capacity shortfalls indicated in Table 6-2.

Alternative 2-2 and 3-2:

Water Conservation Program with Relief Sewers. Implement a water conservation program and provide relief sewers for capacity shortfalls indicated in Table 6-2.

Alternative 2-3 and 3-3:

Equalization Facility. Provide an equalization facility only to relieve capacity shortfalls indicated in Table 6-1.

Alternative 2-4 and 3-4:

Relief Sewers. Provide relief sewers only to relieve capacity shortfalls indicated in Table 6-1.

Alternative 2-5 and 3-5:

Equalization Facility and Relief Sewer. Provide a relief sewer for the most capacity limiting reach (MH 300 to MH 290) and an equalization facility to relieve the remaining capacity shortfalls indicated in Table 6-1.

IMPLEMENTATION REQUIREMENTS

Facilities required for various alternatives are summarized in Table 6-3.

A preliminary opinion of probable cost for the alternatives is included at Table 6-4. As indicated, these are current costs for construction and engineering only and do not include such expenses as

land acquisition, operation and maintenance, and city legal and administrative services. Further detailed engineering and cost analysis should precede selection of a plan for implementation.

TABLE 6-3. CAPACITY ENHANCEMENT FACILITIES REQUIREMENTS

Alter- native	Description	Capacity Improvement Facilities Required	
		Level 2 (Full Buildout)	Level 3 (Partial Buildout)
1	Water Conservation Program and Equalization Facility	<u>Alternative 2-1</u> Equalization Facility Capacity - 1.3 million gallons	<u>Alternative 3-1</u> Equalization Facility Capacity - 500,000 gallons
2	Water Conservation Program and Relief Sewers	<u>Alternative 2-2</u> Parallel Relief Sewers-Size: MH380 to MH310 - 30" MH370 to MH360 - 30" MH360 to MH350 - 30" MH300 to MH290 - 36" MH250 to MH241 - 30" MH230 to MH221 - 30"	<u>Alternative 3-2</u> Parallel Relief Sewers-Size: MH300 to MH290 - 33"
3	Equalization Facility	<u>Alternative 2-3</u> Equalization Facility Capacity - 2.15 million gallons	<u>Alternative 3-3</u> Equalization Facility Capacity - 1,100,000 gallons
4	Relief Sewers	<u>Alternative 2-4</u> Parallel Relief Sewers-Size: MH380 to MH370 - 30" MH370 to MH360 - 33" MH360 to MH350 - 33" MH300 to MH290 - 39" MH250 to MH241 - 33" MH230 to MH221 - 33"	<u>Alternative 3-4</u> Parallel Relief Sewers-Size: MH370 to MH360 - 30" MH360 to MH350 - 30" MH300 to MH290 - 36" MH250 to MH241 - 30" MH241 to MH240 - 30"
5	Equalization Facility and Relief Sewer	<u>Alternative 2-5</u> Equalization Facility Capacity - 650,000 gallons Parallel Relief Sewer-Size: MH300 to MH290 - 39"	<u>Alternative 3-5</u> Equalization Facility Capacity - 150,000 gallons Parallel Relief Sewer Size: MH300 to MH290 - 36"

TABLE 6-4 ENHANCEMENT FACILITIES REQUIREMENTS -
PRELIMINARY OPINION OF PROBABLE COST

<u>Approach</u>	<u>Description</u>	<u>Preliminary Opinion of Probable Cost*</u>	
		<u>Level 2 (Full Buildout)</u>	<u>Level 3 (Partial Buildout)</u>
1	Water Conservation Program and Equalization Facility	<u>Alternative 2-1</u> \$2,040,000	<u>Alternative 3-1</u> \$1,455,000
2	Water Conservation Program and Relief Sewers	<u>Alternative 2-2</u> \$2,220,000	<u>Alternative 3-2</u> \$990,000
3	Equalization Facility	<u>Alternative 2-3</u> \$1,810,000	<u>Alternative 3-3</u> \$1,210,000
4	Relief Sewers	<u>Alternative 2-4</u> \$2,210,000	<u>Alternative 3-4</u> \$1,080,000
5	Equalization Facility and Relief Sewers	<u>Alternative 2-5</u> \$1,220,000	<u>Alternative 3-5</u> \$675,000

*Costs are current construction costs including 30% for engineering and contingency.
(ENR 20 Cities Average Construction Cost Index = 4573 - January 1989)

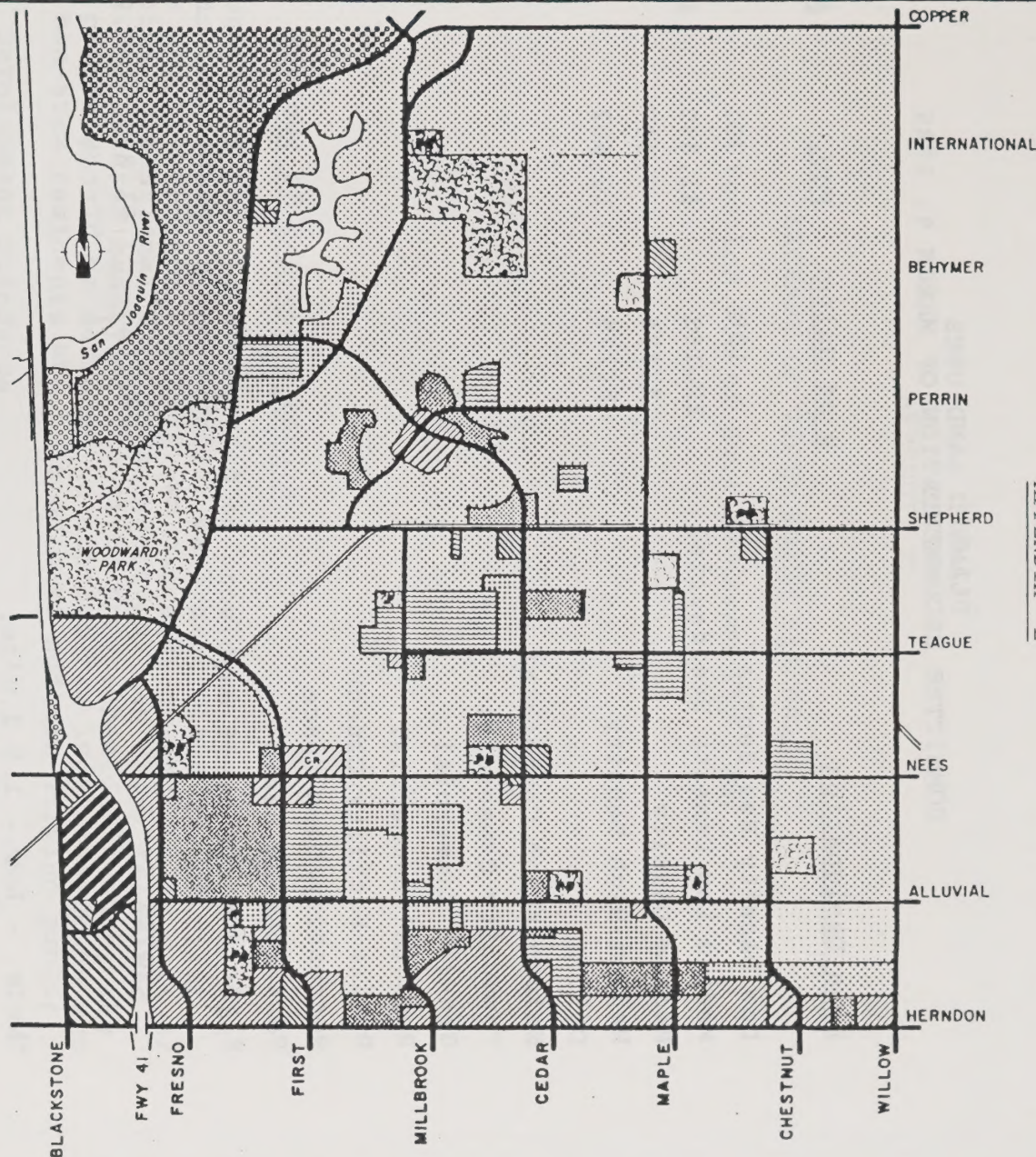
PRELIMINARY INTERIM WOODWARD PARK COMMUNITY PLAN

CITIZEN ADVISORY COMMITTEE RECOMMENDATION

LEGEND

-  AG / URBAN RESERVE
-  RECREATION / OPEN SPACE
-  PARK / PONDING BASIN
-  QUASI - PUBLIC / PUBLIC FACILITY
- RESIDENTIAL**
 -  LOW DENSITY
 -  MED. LOW DENSITY
 -  MEDIUM DENSITY
 -  MEDIUM HIGH DENSITY
- COMMERCIAL**
 -  OFFICE
 -  NEIGHBORHOOD
 -  COMMUNITY (CR - COMMERCIAL RECREATIONAL)
 -  GENERAL
 -  REGIONAL

**PRELIMINARY
FOR ANALYSIS ONLY**



APPENDIX E

PLANNED LAND USES
COMMITTEE RECOMMENDATION OF MARCH 9, 1989

<u>Plan Designation</u>	<u># of Units</u>	<u>Pop.</u>	<u>Acreage</u>
Low Density Residential	108	301	72
Medium Low Density Residential	22,163	61,833	4,925
Medium Density	3,336	9,307	417
Medium High Density	5,175	10,402	345
Office			477
Neighborhood Commercial			69
Community Commercial			54
General Commercial			87
Regional Commercial			40
Public Facility/Church			281
Recreation/Open Space			731
Park/Ponding Basin			388
River and Rights-of-way			404
 TOTAL	 30,782	 81,832	 8,290

*Note: - Low - 1.5 d.u/ac.
ML - 4.5 d.u/ac
Med - 8 d.u/ac.

Population 2.79 persons/household

Med. High 15 d.v/ac. 2.01 persons/household

- Section Acreages not always total 160 acres
- No adjustment made for collectors arterials or expressways
- River and Rights-of-Way include San Joaquin River and local streets

6137T/302

APPENDIX F

EXCERPT OF VISTA POINT STANDARD

Section 5.2 of Bullard Community Plan

5.2.1 Purpose of the Vista Points

The purpose of the vista point is to provide limited bluff access to non-area residents and to offer panoramic views of the river bluffs and riverbottom. Such views can best be enjoyed as part of a passive recreational experience where one can stop, relax and absorb the natural beauty of the river environment. As such, the vista points should be designed to accommodate local residents who walk, non-area residents who hike or bike and the driving public.

5.2.2 Development Standards

A. Location

The six vista point locations are shown on the Bullard Community Plan Map. Two additional vista point locations have been shown on the Woodward Park Community Plan map.

B. Site Area

The site area, if the underlying zoning is single family residential, shall be no less than the minimum lot size and dimensions of the underlying single family residential zone district. The site area shall, in no case, be less than 6,000 square feet in size and have less than 60 feet of frontage on the bluffs.

C. Access and Parking

Each vista point shall have local street access and shall provide a minimum of five off-street parking spaces.

D. Landscaping

Each vista point shall be landscaped so as to beautify the site while keeping maintenance costs at a minimum.

1. Landscaping materials shall be in keeping with the setting, with an emphasis on low water use species.
2. Trees exceeding 15 feet in height at maturity are prohibited within 50 feet of the bluff edge, to preserve views from neighboring properties.
3. Ground cover shall be treated soil, aggregate, or low-lying vegetation.
4. An irrigation system shall be installed to adequately maintain the landscaping.
5. The vista point site shall be graded away from the bluffs and proper erosion control measures instituted.

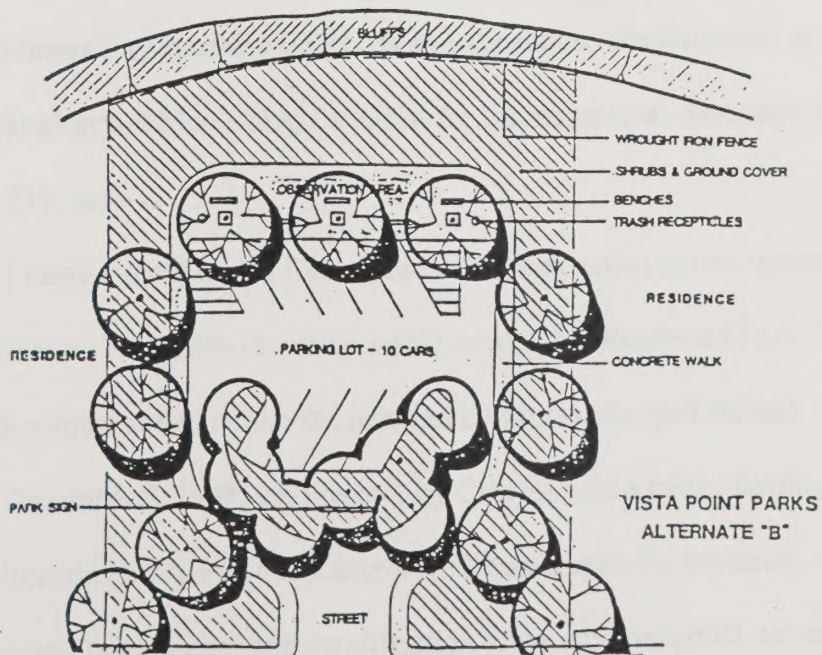
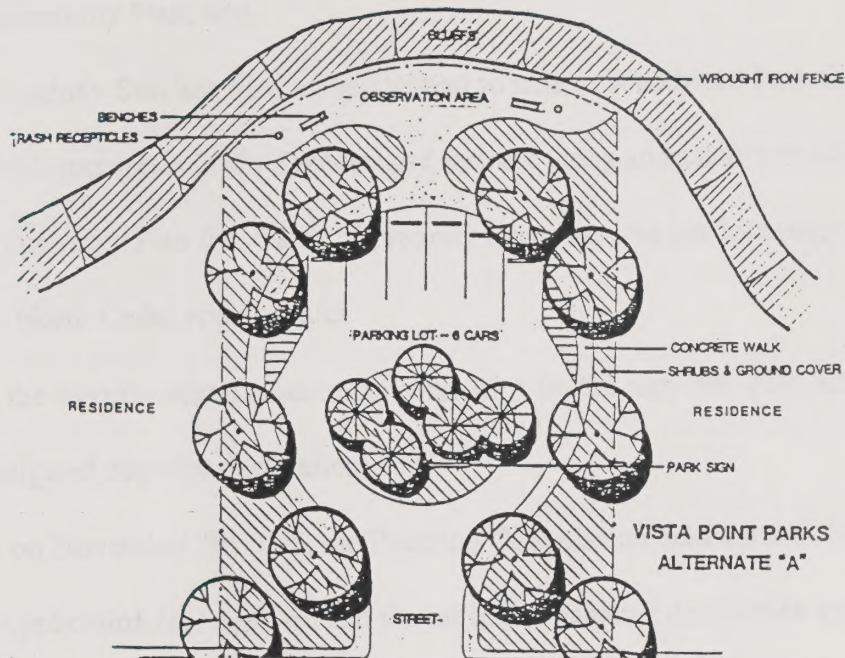
E. Street Furniture, Fencing, Lighting

1. Each site shall contain at least two benches placed near the bluff edge.
2. Each site shall contain a trash enclosure.
3. A low profile wooden sign 6" X 18" with the words "Vista Point: shall be placed at the site entrance.
4. The requirement for protective fencing along the bluff edge shall be determined by the Director, depending on the slope of the bluff at each particular site. Where required, the fence shall not exceed four feet in height and shall be wrought iron or other material which blends with the setting.
5. Street lighting according to City requirements shall be installed on the street leading to the vista point. Within the site, lighting shall be limited to low, hooded light standards for safety and security.

EXHIBIT 5.2

BULLARD COMMUNITY PLAN

Suggested Vista Point Designs



RESOLUTION NO. 98-372

A RESOLUTION OF THE COUNCIL OF THE CITY OF FRESNO,
CALIFORNIA, AMENDING THE WOODWARD PARK COMMUNITY
PLAN (PLAN AMENDMENT APPLICATION NO. A-98-16)

WHEREAS, on December 5, 1989, by Resolution No. 89-464, the City Council adopted the Woodward Park Community Plan; and,

WHEREAS, Madnav Suri has filed an application to amend Woodward Park Community Plan Policy No. 3-4.6 which requires a 20-foot landscaped setback along arterial streets within the Woodward Park Community Plan for .6 acre of property located on the northwesterly corner of North Eleventh Street and North Cedar Avenue; and,

WHEREAS, the environmental assessment conducted for the proposed plan amendment resulted in the filing of a mitigated negative declaration; and,

WHEREAS, on November 18, 1998, the Planning Commission held a public hearing to consider Plan Amendment Application No. A-98-16 and the mitigated negative declaration and associated Monitoring Checklist for Environmental Assessment No. A-98-16 and S-98-219; and,

WHEREAS, the Fresno City Planning Commission took action to recommend approval of the mitigated negative declaration and Monitoring Checklist for Environmental Assessment No. A-98-16 and S-96-219; and,

WHEREAS, the Fresno City Planning Commission also took action to recommend approval of Plan Amendment Application No. A-98-16, which would amend the Woodward Park Community Plan Policy No. 3-4.6 for the subject site to reduce the required 20-foot landscaped setback to 14 feet; and,

WHEREAS, on December 8, 1998, the Fresno City Council held a public hearing to consider Plan Amendment Application No. A-98-16 and determined, based upon the testimony and information presented at the hearing and upon review and consideration of the environmental documentation

provided, that the adoption of the proposed amendment is in the best interest of the City of Fresno.

Adopted 12/8/98
Approved 12/8/98
Effective 12/8/98

98-372

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Fresno as follows:

1. That Council finds that there is no substantial evidence in the record that Plan Amendment Application No. A-98-16 may have a significant effect on the environment and hereby adopts the mitigated negative declaration subject to compliance with the mitigation measures specified in the environmental assessment.
2. The Council of the City of Fresno hereby adopts Plan Amendment Application No. A-98-16, amending Woodward Park Community Plan Policy No. 3-4.6 to read as follows:

Planned expressways and arterial streets shall be developed with a mandatory 20-foot landscaped setback, except where a multipurpose trail is proposed and at 7151 North Cedar Avenue (APN: 404-060-24).

CLERK'S CERTIFICATE

STATE OF CALIFORNIA)
COUNTY OF FRESNO)
CITY OF FRESNO)

I, REBECCA E. KLISCH, City Clerk of the City of Fresno, certify that the foregoing resolution was adopted by the Council of the City of Fresno, California, at a regular meeting held on the 8th day of December, 1998, by the following vote:

Ayes: Bredefeld, Perea, Quintero, Steitz, Mathys
Noes: None
Absent: Ronquillo

Dated this 8th day of December, 1998.

REBECCA E. KLISCH
City Clerk

By Rebecca E. Klisch
~~Deputy~~

APPROVED AS TO FORM:

HILDA CANTÚ MONTÓY
City Attorney

By [Signature]
Deputy

Application No. A-98-16
Filed by Madnav Suri
Parcel Nos. 404-060-24

U.C. BERKELEY LIBRARIES



C124925047

